ROHDE&SCHWARZ

Radio Communications Division

Appendix

INTERFACE DESCRIPTION
CIRCUIT DIAGRAMS
PARTS LISTS
COMPONENTS LAYOUTS

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
.	XX VARIANTENERKLAERUNG IDENTIFICATION OF MODELS VAR 02 = GRUNDAUSFUEHRUNG MOD 02 = BASIC MODEL VAR 12 = FUER HOHE PRAEZI-SION MOD 12 = FOR HIGH PRECI-SION VAR 13 = FUER STANDARD/ OFFSET MOD 13 = FOR STANDARD/ VAR 22 = MIT TCXO MOD 22 = WITH TCXO VAR 23 = MIT OCXO MOD 23 = WITH OCXO			FCC ID: KVW60439043	
..	ZUG.PROD.DOC./ADDIT.DOCUM ADDITIONAL DOCUMENT				
...	ZUGEH.STROML./CIRC.DIAGR. CIRC.DIAGR.				
A1	EE VHF SYNTHESIZER BOARD EE SINGLE-CHAN. SYNTH. NUR VAR/ONLY MOD: 02	6044.6990.02			
A1	EE VHF SYNTHESIZER BOARD VHF SYNTHESIZER BOARD NUR VAR/ONLY MOD: 12	6044.6990.12			
A1	EE VHF SYNTHESIZER BOARD VHF SYNTHESIZER BOARD NUR VAR/ONLY MOD: 13	6044.6990.13			
A1	ED SYNTHESIZER PLATTE SYNTHESIZER BOARD NUR VAR/ONLY MOD: 22	6044.7244.02			
A1	ED SYNTHESIZER_PLATTE SYNTHESIZER BOARD NUR VAR/ONLY MOD: 23	6044.7244.03			

Schnittstellenbeschreibung
Interface Description

FCC ID: KVW60439043

zu: **SYNTHESIZER_PLATTE** **Sach-Nr.:** 6044.7244.01
for: *SYNTHESIZER_BOARD* *Part No.:*

Blatt Nr.: / *Sheet No.:*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Änd.-Index / *Change Index:*																				
Blatt Nr.: / *Sheet No.:*	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Änd.-Index / *Change Index:*																				

erstellt von: **Hecker / 2BF2** **Datum:** **29.04.1996**
issued by: *Date:*

Abt. / *Dpt.:* 2BFK2	Name: Raab	Datum / *Date:* 29.04.1996	Ä.M. / *C.N:*	Ä.I. / *C.I.:* 03
ROHDE & SCHWARZ	Benennung: SYNTHESIZER_PLATTE *Designation:* *SYNTHESIZER_BOARD*			Bl. / *Sh.* 1 von / *of* 3
			Sachnummer / *Part No.:* 6044.7244.01 SB	

Eintragung in der Spalte R (Richtung) / *Entry in column D (direction)*: O = Ausgang / *Output* I = Eingang / *Input* B = Bidirektional / *Bidirectional*
Eintragung in der Spalte A (Art) / *Entry in column T (type)*: A = Analog D = Digital P = Power
Eintragung in der Spalte PT (Prüf- und Trimmplan) / *Entry in column TI (test instructions)*: P = Prüfwert *P = Test value* T = Trimmwert *T = Trimming value* D = Typprüfwert *D = Type test value* E = Einstellwert *E = Setting value*

Signal Name Beschreibung / *Description*	R *D*	A *T*	Wertebereich *Range*	PT *TI*	Bild Nr. *Fig. No.*	Anschlußpunkt *Contact*	Bemerkung *Remarks*
Masse *GND*	B	P	0 V			X43.1	
Sendefrequenzablage *OFFSET*	O	D	Low < 0,5 V, High = 5 V *low < 0.5 VDC,* *high = 5 VDC*	P		X43.2	High= Sendefrequenz- ablage eingeschaltet *high = OFFSET on*
+18V	I	P	+ 17,8...20 V, *+ 17.8...20 VDC*	P		X43.3	Betriebs- spannung (max. 450mA) *Supply voltage*
SDA	B	D	CMOS	P		X43.4	I^2C-Serieller Datenbus für Vielkanalbetrieb Fernbedienung. *I^2C serial data bus for multi-channel remote control.*
Masse *GND*	B	P	0 V			X43.5	
SCL	I	D	CMOS	P		X43.6	I^2C-Bus Takt *I^2C-bus clock*
Synthesizer Test *SYTEST*	O	D	Low < 0,4 V, High=offener Kollektor *low < 0.4 VDC,* *high = open collector*	P		X43.7	Low = Fehler High = gerastet *low = fail* *high = locked*
Nicht belegt *n.c.*						X43.8	
Sendekontakt **PTT*	I	D	CMOS	P		X43.9	Low = TX , High = RX bei RX: Versatz +50 kHz *when RX: offset +50 kHz*
Nicht belegt *n.c.*						X43.10	

Abt. / *Dpt.*: 2BFK2	Name: Raab	Datum / *Date*:29.04.1996	Ä.M. / *C.N.*:	Ä.I. / *C.I.*: 03
ROHDE & SCHWARZ	Benennung: SYNTHESIZER_PLATTE *Designation*: *SYNTHESIZER_BOARD*			Bl. / *Sh.* 2 von / *of* 3
Typ / *Type*: GF201V	reg.i.Verz. / *reg. in*: 6044.6948 V		Sachnummer / *Part No.*: 6044.7244.01 SB	

Eintragung in der Spalte R (Richtung) / *Entry in column D (direction)*: O = Ausgang / *Output* I = Eingang / *Input* B = Bidirektional / *Bidirectional*
Eintragung in der Spalte A (Art) / *Entry in column T (type)*: A = Analog D = Digital P = Power
Eintragung in der Spalte PT (Prüf- und Trimmplan) / *Entry in column TI (test instructions)*: P = Prüfwert / *Test value* T = Trimmwert / *Trimming value* D = Typprüfwert / *Type test value* E = Einstellwert / *Setting value*

Signal Name Beschreibung / *Description*	R *D*	A *T*	Wertebereich *Range*	PT *TI*	Bild Nr. *Fig. No.*	Anschlußpunkt *Contact*	Bemerkung *Remarks*
HF-Ausgang *RF-OUT*	O	A	+13 dBm ± 2 dB (118...144 MHz)	P		X94	HF-Pegel *RF-Level*
			± 0,2 ppm (-20°C...+60°C)	D			Frequenz-genauigkeit *Frequency accuracy*
			± 10 Hz (25 °C)	E			Einstellwert *Setting accuracy*
			a ≥ 84 dBc (df ≥ 25 kHz)	P			Nebenwellen-abstand *Spurious*
			a ≥ 150 dBc/Hz (df ≥ 1 % Fc)	D			Seitenband-rauschabstand *Sideband noise power density*

FCC ID: KVW60439043

Abt. / *Dpt.*: 2BFK2	Name: Raab	Datum / *Date*: 29.04.1996	Ä.M. / *C.N.*:	Ä.I. / *C.I.*: 03
ROHDE & SCHWARZ	Benennung: SYNTHESIZER_PLATTE *Designation*: *SYNTHESIZER_BOARD*			Bl. / *Sh.* 3 von / *of* 3
Typ / *Type*: GF201V	reg.i.Verz. / *reg. in*: 6044.6948 V		Sachnummer / *Part No.*: 6044.7244.01 SB	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
.	XX VARIANTENERKLAERUNG IDENTIFICATION OF MODELS VARO2=GRUNDAUSFUEHRUNG MODO2=BASIC_MODEL VARO3=FUER HOHE PRAEZISION MODO3=FOR HIGH PRECISION				
C100	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C101	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C102	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C103	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C104	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C105	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C106	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C107	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C108	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
..111					
C200	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C201	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C202	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C203	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
..205					
C206	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C207	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
..211					
C212	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	
C213	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	
C214	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C215	CC 120PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8838.00	VITRAMON	VJ 1206 A 121 F AT	
C216	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C217	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C218	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C219	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	
C220	CC 1PF+-0,25 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8667.00	VITRAMON	VJ1206A 1RO CXAT	
C221	CC 39PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8796.00	VITRAMON	VJ1206 A 390 F AT	
C222	CC 1PF+-0,25 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8667.00	VITRAMON	VJ1206A 1RO CXAT	
C223	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	
C224	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C225	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C226	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C227	CC 1UF+-10% 50V X7R 2220 CERAMIC CAPACITOR	CC 0520.6873.00	VITRAMON	VJ 2220 Y105 KFATM	
C228	CC 1ONF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C229	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C230	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	

FCC ID: KVW60439043

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C231	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C232	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C233	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C234	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C235	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C236	CC 270PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8867.00	VITRAMON	VJ1206 A 271 F AT	
C300	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C301	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C302	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C303	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C304	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C305	CC 1,5PF+-0,25PF3X4P100 CAPACITOR	CC 0087.6193.00	PHILIPS-CO	2222 678 03158	
C306	CC 4,7PF/0,25PF63V3X5N150 CAPACITOR	CC 0099.5551.00	PHILIPS-CO	2222 678 33478	
C307	CC 10PF+-0,25PF3X4N150 CAPACITOR	CC 0087.6593.00	PHILIPS-CO	2222 678 33109	
C308	CC 22PF+-2%4X5NP0 CAPACITOR	CC 0087.6464.00	PHILIPS-CO	2222 678 10229	
C309	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C310	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C311	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C312	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C313	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C314	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C315	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C316	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C317	CC 3,3PF+-0,25PF3X4NP0 CAPACITOR	CC 0087.6364.00	PHILIPS-CO	2222 678 09338	
C318	CC 4,7PF/0,25PF63V3X5N150 CAPACITOR	CC 0099.5551.00	PHILIPS-CO	2222 678 33478	
C319	CC 10PF+-0,25PF3X4N150 CAPACITOR	CC 0087.6593.00	PHILIPS-CO	2222 678 33109	
C320	CC 22PF+-2%4X5NP0 CAPACITOR	CC 0087.6464.00	PHILIPS-CO	2222 678 10229	
C321	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C322	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C323	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C333	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C334	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C335	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C336	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C337	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C338	CC 5,6PF+-0,25PF4X5P100 CAPACITOR	CC 0087.6264.00	PHILIPS-CO	2222 678 03568	
C339	CC 4,7PF/0,25PF63V3X5N150 CAPACITOR	CC 0099.5551.00	PHILIPS-CO	2222 678 33478	
C340	CC 10PF+-0,25PF3X4N150 CAPACITOR	CC 0087.6593.00	PHILIPS-CO	2222 678 33109	
C341	CC 22PF+-2%4X5NP0 CAPACITOR	CC 0087.6464.00	PHILIPS-CO	2222 678 10229	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C342	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C343	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C344	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C350	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE EL	293D X9 010 D2T	
C351	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C352	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE EL	293D X9 010 D2T	
C353	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C354	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE EL	293D X9 010 D2T	
C355	CE 10UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7246.00	SPRAGUE EL	293D-106X9-025 D2T	
C401	CC 270PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8867.00	VITRAMON	VJ1206 A 271 F AT	
C402	CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8415.00	VITRAMON	VJ1206 A 101 F AT	
C403	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C404	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C405	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C406 ..408	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C409	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
D200	BL PC74HC123T 2XMULTIVIB DUAL MULTIVIBRATOR	BL 0007.3528.00	PHILIPS SE	74HC123D	
D400	BL PC74HC08T 4X2IN.ANDG QUAD 2INPUT AND GATE	BL 0007.3486.00	PHILIPS SE	74HC08D	
D401	BC PCB80C552 8B.MCU 8-BIT MICROCONTROLLER	2035.5999.00	PHILIPS SE	PCB80C552-5-16WP	
D402	BL PC74HC573T 8XD-LATCH OCTAL D-TYPE LATCH	BL 0007.3586.00	PHILIPS SE	74HC573D	
D403	HS SOFTWARE	6044.7273.02			
D404	BL PC74HCT00T 4X2IN.NAND NAND GATE	BL 0007.6156.00	PHILIPS SE	74HCT00D	
L100	LD 1,0 UH 10% 465 MIA CHOKE	LD 0092.3153.00	GOWANDA	8/M101K	
L101	LD 1,0 UH 10% 465 MIA CHOKE	LD 0092.3153.00	GOWANDA	8/M101K	
L200	LD 100NH 10% 0,44A 1210 SMD-INDUCTOR	LD 0007.9249.00	SIEMENS	B82422-A3101-K100	
L201	LD 68NH 10% 0,24A 1210 SMD-INDUCTOR	0009.7966.00	SIEMENS	B82422-A3680-K100	
L202	LD 68NH 10% 0,24A 1210 SMD-INDUCTOR	0009.7966.00	SIEMENS	B82422-A3680-K100	
L300	LD 1,0 UH 10% 465 MIA CHOKE	LD 0092.3153.00	GOWANDA	8/M101K	
L301	LD 1,0 UH 10% 465 MIA CHOKE	LD 0092.3153.00	GOWANDA	8/M101K	
L302	LD 10,0UH 10% 102 MIA CHOKE	LD 0092.3276.00	GOWANDA	8/M102K	
L303	LD 1,0 UH 10% 465 MIA CHOKE	LD 0092.3153.00	GOWANDA	8/M101K	
L304	LD 180NH 4,5W CM14P FE-K CHOKE	0303.9024.00	COMPONEX	301SS-0400	
L305	LD 1,0 UH 10% 465 MIA CHOKE	LD 0092.3153.00	GOWANDA	8/M101K	
L306	LD 10,0UH 10% 102 MIA CHOKE	LD 0092.3276.00	GOWANDA	8/M102K	
L307	LD 1,0 UH 10% 465 MIA CHOKE	LD 0092.3153.00	GOWANDA	8/M101K	
L308	LD 180NH 4,5W CM14P FE-K CHOKE	0303.9024.00	COMPONEX	301SS-0400	
L309	LD 1,0 UH 10% 465 MIA CHOKE	LD 0092.3153.00	GOWANDA	8/M101K	
L310	LD 10,0UH 10% 102 MIA CHOKE	LD 0092.3276.00	GOWANDA	8/M102K	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
L311	LD 1,0 UH 10% 465 MIA CHOKE	LD 0092.3153.00	GOWANDA	8/M101K	
L312	LD 180NH 4,5W CM14P FE-K CHOKE	0303.9024.00	COMPONEX	301SS-0400	
L313	LD 1UH 10% 0,38A 1210 SMD-INDUCTOR	LD 6006.0130.00	SIEMENS	B82422-A1102-K100	
L400	LD 2,2UH 10% 0,27A 1210 SMD-INDUCTOR	LD 0520.7870.00	SIEMENS	B82422-A1222-K100	
N100	BO LM7812CT+12V1AO VREGL VOLTAGE REGULATOR	BO 0344.9641.00	NAT. SEMIC	LM340T12	
N101	BO LM340T + 5V1AO VREGL VOLTAGE REGULATOR	BO 0336.4615.00	NAT. SEMIC	LM-340T5	
N200	BO OP27GS LN OPAMP OPAMP	6024.3214.00	PMI	OP27GS	
N201	BO OP27GS LN OPAMP OPAMP	6024.3214.00	PMI	OP27GS	
N202	BL TBB206G SYNTH IC SYNTHSIZER	1051.4016.00	SIEMENS	TBB206G Q67100-H8723	
N203	BL SA701D 65/129MAX PRESC IC PRESCALER	6043.2078.00	PHILIPS SE	SA701D	
R100	RG 4,32KOHM+-1%TK100 1206 RESISTOR CHIP NUR VAR/ONLY MOD: 02	RG 0007.5814.00	DALE	CRCW1206-10 4K32 F-T	
R101	RS 0,3W 10KOHM+-10%CERMET DEPOS-CARBON POTENTIOMET	RS 0086.7944.00	BOURNS	3292X-1- 10KOHM+-10%	
R102	RG 4,32KOHM+-1%TK100 1206 RESISTOR CHIP NUR VAR/ONLY MOD: 02	RG 0007.5814.00	DALE	CRCW1206-10 4K32 F-T	
R103 ..106	RG 475 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5695.00	DALE	CRCW1206-10 475R F-T	
R107	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R200	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R201	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R202 ..207	RG 475 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5695.00	DALE	CRCW1206-10 475R F-T	
R208	RG 2,74KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5766.00	DALE	CRCW1206-10 2K74 F-T	
R209	RG 475 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5695.00	DALE	CRCW1206-10 475R F-T	
R210	RG 61,9 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8832.00	DALE	CRCW1206-10 61R9 F-T	
R211	RG 243 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5620.00	DALE	CRCW1206-10 243R F-T	
R212	RG 61,9 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8832.00	DALE	CRCW1206-10 61R9 F-T	
R213 ..215	RG 16,2 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8690.00	DALE	CRCW1206-10 16R2 F-T	
R216	RG 301 OHM+-1%TK100 1206 RESISTOR CHIP NICHT BESTUECKT NOT FITTED	RG 0007.5643.00	DALE	CRCW1206-10 301R F-T	
R217	RG 0-OHM WIDERSTAND-CHIP RESISTOR CHIP 0-OHM	RG 0007.5108.00	DRALORIC	CR 1206	
R218	RG 301 OHM+-1%TK100 1206 RESISTOR CHIP NICHT BESTUECKT NOT FITTED	RG 0007.5643.00	DALE	CRCW1206-10 301R F-T	
R219	RG 16,2 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8690.00	DALE	CRCW1206-10 16R2 F-T	
R220	RG 332 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5650.00	DALE	CRCW1206-10 332R F-T	
R221	RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5566.00	DALE	CRCW1206-10 47R5 F-T	
R222	RG 1,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9951.00	DALE	CRCW1206-10 1K1 F-T	
R223	RG 1,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9951.00	DALE	CRCW1206-10 1K1 F-T	
R224	RG 301 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5643.00	DALE	CRCW1206-10 301R F-T	
R225	RG 18,2 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5466.00	DALE	CRW1206-10 18R2 F-T	

3-0693

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R226	RG 301 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5643.00	DALE	CRCW1206-10 301R F-T	
R227	RG 5,62KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0735.00	DALE	CRCW1206-10 5K62 F-T	
R228	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R229	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R230	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R231 ..233	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	
R234	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	
R235	RG 1,5 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5714.00	DALE	CRCW1206-10 1K5 F-T	
R236	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R237	RG 39,2 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5543.00	DALE	CRCW1206-10 39R2 F-T	
R238	RG 2,74KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5766.00	DALE	CRCW1206-10 2K74 F-T	
R240	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R300	RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5720.00	DALE	CRCW1206-10 1K82 F-T	
R301	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R302 ..304	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R305	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R306	RG 681 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9080.00	DALE	CRCW1206-10 681R F-T	
R307	RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5720.00	DALE	CRCW1206-10 1K82 F-T	
R308	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R309 ..311	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R312	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R313	RG 619 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9074.00	DALE	CRCW1206-10 619R F-T	
R314	RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5720.00	DALE	CRCW1206-10 1K82 F-T	
R315	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R316 ..318	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R319	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R320	RG 511 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9051.00	DALE	CRCW1206-10 511R F-T	
R321	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R350 ..352	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R400	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R401 ..422	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R423	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R424	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R425	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R426	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R450 ..453	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
S1 ..3	SK CODIERSCH.DIL 8P. WINK CODER SWITCH	6024.3766.00	GRAYHILL	76PGB08S	
T200	LU UEBERTRAGER TRANSFORMER	0584.6616.00			

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
T300 ..302	LU UEBERTRAGER TRANSFORMER	0584.6616.00			
U100	EO 10.000000MHZ QUA-OSZ5V CRYSTAL OSZILLATOR VTCXO NUR VAR/ONLY MOD: 02	1036.4331.00	PHILIPS	9922 515 00037	
U101	EO 10MHZ-QU.OSZ.OCXO 12V 10MHZ CRYSTAL OSCILLATOR NUR VAR/ONLY MOD: 03	0807.8085.00	QUARZKERAM	2100T-S161 (H)	
V201	AK BFR193 N 12V 80MA TRANSISTOR	6024.2718.00	SIEMENS	BFR193 Q62702-F1218	
V202	AK BFR193 N 12V 80MA TRANSISTOR	6024.2718.00	SIEMENS	BFR193 Q62702-F1218	
V300	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V301	AK BCX71J P 45V 200MA TRANSISTOR	AK 0007.2096.00	PHILIPS-CO	BCX71J	
V302	AE BB405B 11/ 2PF CDI TUNING DIODE	AE 0596.6839.00	PHILIPS SE	BB405B	
V303	AE BB405B 11/ 2PF CDI TUNING DIODE	AE 0596.6839.00	PHILIPS SE	BB405B	
V304	AK BFS17 N 30V 50MA TRANSISTOR	AK 0010.6460.00	PHILIPS-CO	BFS17	
V305	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V306	AK BCX71J P 45V 200MA TRANSISTOR	AK 0007.2096.00	PHILIPS-CO	BCX71J	
V307	AE BB405B 11/ 2PF CDI TUNING DIODE	AE 0596.6839.00	PHILIPS SE	BB405B	
V308	AE BB405B 11/ 2PF CDI TUNING DIODE	AE 0596.6839.00	PHILIPS SE	BB405B	
V309	AK BFS17 N 30V 50MA TRANSISTOR	AK 0010.6460.00	PHILIPS-CO	BFS17	
V310	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V311	AK BCX71J P 45V 200MA TRANSISTOR	AK 0007.2096.00	PHILIPS-CO	BCX71J	
V312	AE BB405B 11/ 2PF CDI TUNING DIODE	AE 0596.6839.00	PHILIPS SE	BB405B	
V313	AE BB405B 11/ 2PF CDI TUNING DIODE	AE 0596.6839.00	PHILIPS SE	BB405B	
V314	AK BFS17 N 30V 50MA TRANSISTOR	AK 0010.6460.00	PHILIPS-CO	BFS17	
V315	AE HSMP3824T31 2X35V PIN DIODE	0720.6869.00	HEWLETT-PA	HSMP3824 L31	
V316	AE HSMP3824T31 2X35V PIN DIODE	0720.6869.00	HEWLETT-PA	HSMP3824 L31	
V400	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
X43	DY FLACHBANDLEITUNG X43	6044.7115.00			
X94	FJ EINBAUSTECKER F.GS SMB ANGLE CONNECTOR	FJ 0602.8804.00	ROSENBERGE	59S-206-400-D3	
X200	FP STIFTLEISTE 4P.R2,54 PIN CONNECTOR	FP 0009.6147.00			
X401 ..403	FP STIFTLEISTE 10P.R2,54 PIN CONNECTOR	FP 0009.5892.00			

ROHDE&SCHWARZ

Radio Communications Division

FCC ID: KVW60439043

Repair Manual

MODULATOR
GM 201

6044.5941.02 / .03

Please note:

The Models 02 and 03 of the Modulator GM 201 are of almost identical design.

Therefore you will find the text of the following Repair Manual referring to Model 02 (6044.6048), whereas the circuit diagrams, parts list and components layouts in the Appendix refer to Models 02 (6044.6048) and 03 (6044.6248).

The differences between the two models are listed in the following table.

Modification (reason)	Scope
REM BUS Extension of functions: user-defined bit via REM BUS	V841, X841, V842, V843, R842 all added; R841 wired differently
REM BUS protection for faulty data (software fault or interferences)	V819, V822, V823, V824, V825, V826, V827, V828, V829 all added
REM BUS with memory for storing the state after switch-off (e.g. switch-off due to faults)	other type of IC for D840; V852, R852 added
MAIN / STBY MAIN / STBY switchover	D960, R912 added
MAIN / STBY switchover	R441 added; D404B, R440 wired differently; X410, C410 removed, C411 with different value
Miscellaneous Lower threshold of undervoltage reduction (power reduction via control circuit)	R628 selected to have 43 kΩ
External power amplifier: AF output for additional amplifiers	R242 added
Improvement of space management for inband interface	R433, C431 removed; R432 wired differently; V433 added

List of Contents

Note: These sections are contained in the User Manual of the relevant transmitter or transceiver.

5. Description of Function

Page

6. Repair

(See also Circuit Diagram, Parts List and Components Layout in the Appendix to this Repair Manual.)

6.1 Preliminary Remarks

6.1.1 General

The repair of Modulator GM 201 starts with the initial check in order to obtain information on the functional order of the unit and its technical data.

In the case where faults cannot be clearly localized the test results will be the starting point for repair.

6.1.2 Restoring the Nominal Characteristics

Any component that is proved to be defective by means of the initial check and other troubleshooting procedures should only be replaced by a component that meets the specifications of the parts list in the Appendix to this Repair Manual.

Only in this way can the technical data be guaranteed that are given in Section 1 of the relevant User Manual.

After replacement of components, it is absolutely necessary to carry out the final test according to 6.6.

6.1.3 Spare Parts

All components are subjected to strict quality control before they are built into the unit.

For components from outside suppliers, e.g. resistors, capacitors and diodes, R&S have laid down their own delivery specifications for the purpose of ensuring maximum reliability.

For this reason we recommend that only original spare parts be used for replacing defective components.

When ordering a spare part, please state the following:

- Type,
- Ordering code of equipment,
- Serial number of equipment,
- Identification number of parts list,
- Designation plus stock number of component.

All of these details are to be found in the circuit diagram, parts list and components layout that accompany the manual.

6.2 Test Equipment and Special Tools

For the repairs described in this manual the test equipment laid down in the test equipment list is required.

Note:

Equivalent test equipment may be used.
Special tools are not required.

6.2.1 List of Test Equipment

Item	Type of equipment, required data	Equipment recommended by R&S	Ordering code
1	Digital Multimeter accuracy: 1 % of measured value with 10-A shunt 0 to 10 A	UDL 45 UDL 4-Z2	1037.1507.02 0346.8065.02
2	Power Supply + 10 VDC / 0.1 A -10 VDC / 0.1 A	NGT 20	117.7133.02
3	Power Supply 0 to 40 VDC / 50 mA	NGRU 50	192.0210.05
4	Power Supply + 5 VDC / 50 mA + 18 VDC / 0,5 A + 18 to + 30 VDC / 50 mA	NGT 35	191.2019.02
5	Oscilloscope DC to 10 MHz	common workshop model	
6	Personal Computer (IBM-compatible, VGA, LPT1, mouse)	commercial	
7	AF Generator 100 Hz to 5 kHz (sinusoidal) k < 0.1 %	APN 04	844.6001.04

6.3 Initial Check

6.3.1 Visual Check

If a fault occurs first of all subject the modulator to a visual check. For this purpose open the unit according to Section 6.5.

1. Carefully examine the connectors for broken, corroded or bent pins / sockets. If necessary, replace defective connectors according to 6.5.2.

CAUTION

If a connector shows any discolouration caused by heat, its mating connector is also defective. Both must therefore be replaced.

2. Examine the PCB for discolouration and disrupted tracks.

   If any damage is found on the PCB due to heat, we recommend the replacement of the entire assembly.

3. In order to guarantee the high reliability of the module, it is absolutely essential to replace any discoloured components in compliance with 6.5.2.

No.	Activity	Nominal value	Fault elimination
	; keywords Tx#1, Tx#2, Rx#1, Rx#2 ; ':' address (0..63), ; '.' slot number of Rx (1..8) ; ; take address 64 for receiver without ; REMBUS driver or multicoupler No:00 Rx#1:64.2 Rx#2:64.3 ; ; example for separated Rx and Tx; Rx with address + '.' + slot number No:01 Tx#1:56 Rx#1:00.1 Tx#2:57 Rx#2:00.2 ; ; example for transceiver; Rx only with address No:02 Tx#1:57 Rx#1:57 No:03 Tx#1:57 Rx#1:57 Tx#2:58 Rx#2:58 No:04 Tx#1:57 Rx#1:00.1 Tx#2:58 Rx#2:00.8 ; ; single transmitter No:05 Tx#1:57 ; ; single receivers, some with test generator ; ':' address (0..63), ; '.' slot number of Rx (1..8) ; '-' address of corresponding test generator ; '/' channel of test generator with corresponding frequency No:06 Rx#1:00.1-00/01 Rx#2:00.2-00/01 No:07 Rx#1:00.3 Rx#2:00.4 No:08 Rx#1:00.5 Rx#2:00.6 No:09 Rx#1:00.7 Rx#2:00.8 ; ; the channel numbers 10 to 16 are used for service with ; R&S-Service Manuals of series 200 ; ; single receiver, address 4 No:10 Rx#1:64.4 ; ; two receivers (Main-Standby), address 2 and 3 No:11 Rx#1:64.2 Rx#2:64.3		

No.	Activity	Nominal value	Fault elimination
3.	**Digital control functions**		
3.1	**Switch-off control**		
3.1.1	Apply low level to A73, *OFF / ON (X73.40).		
3.1.2	Measure DC voltage at A35, ON-TX (X35.20).	≤ 1 V	acc. to 6.4.2
3.1.3	Measure DC voltage at A73, *OFF-TX-1 (X73.9).	≥ 3.5 V	
	Possible cause of fault: V440		
3.1.4	Remove low level from A35, *OFF / ON (X73.40).		
3.1.5	Apply low level to A73, *OFF-TX-2 (X73.10).		
3.1.6	Measure DC voltage at A35, ON-TX (X35.20).	≤ 1V	
	Possible cause of fault: V410		
3.1.7	Remove low level from A73, *OFF-TX-2 (X73.10).		
3.1.8	Apply low level to the following contacts: A73, *REMOTE-1 (X73.22), A73, *OFF-1 (X73.5)		
3.1.9	Measure DC voltage at A35, ON-TX (X35.20).	≤ 1 V	
	Possible cause of fault: V420, D404, V435, D405		

No.	Activity	Nominal value	Fault elimination
3.2	**PTT control**		
3.2.1	Apply low level to A13, *PTT-MIC (X13.15).		
3.2.2	Measure DC voltage at A73, PTT (X73.28).	≥ 3.5 V	acc. to 6.4.3
3.2.3	Measure DC voltage at A93, *PTT-A (X93.9).	≤ 1 V	
	Possible cause of fault: V524		
3.2.4	Check indication PTT at REM bus PC.	◆	acc. to 6.4.5
3.2.5	Remove low level from A13, *PTT-MIC (X13.15).		
3.2.6	Apply low level to A35, *PTT-VOX (X35.8).		
3.2.7	Measure DC voltage at A73, PTT (X73.28).	≥ 3.5 V	
	Possible cause of fault: D503, D505		
3.2.8	Remove low level from A35, *PTT-VOX (X35.8).		
3.2.9	Apply low level to the following contacts:		
	A73, *PTT-INT (X73.8), A73, *REMOTE-1 (X73.22)		
3.2.10	Measure DC voltage at A73, PTT (X73.28):	≥ 3.5 V	
	Possible cause of fault: D503, D505, D522, D520		
3.2.11	Remove low level from A73, *PTT-INT (X73.8).		
3.1.12	Apply low level to A73, *PTT-INB (X73.35).		
3.1.13	Measure DC voltage at A73, PTT (X73.28).	≥ 3.5 V	
	Possible cause of fault: D503, D505		

No.	Activity	Nominal value	Fault elimination
4.2	**Modulation output**		
4.2.1	Apply low level to A13, *PTT-MIC (X13.15) (activate carrier).		
4.2.2	Increase voltage at A93, MOD-Imax until the voltage at A93, IMOD reaches 0.8 V.		
4.2.3	Measure DC voltage at A13, CBIT-TX-1 (X13.17).	≤ 1 V	acc. to 6.4.4.3
4.2.4	Remove low level from A13, *PTT-MIC (X13.15) and after a short delay re-apply (error reset).		
4.2.5	Increase voltage at A93, MOD-Vmax (max. 10 V!), until the voltage at X960.2 changes from ≥ 3.5 V to ≤ 1 V.		
4.2.6	Measure DC voltage at A93, MOD (X93.16).	8 to 9 V	acc. to 6.4.4.3
4.2.7	Measure DC voltage at A13, CBIT-TX-1 (X13.17).	≤ 1 V	acc. to 6.4.4.3
4.2.8	Remove low level from A13, *PTT-MIC (X13.15) and after a short delay re-apply (error reset).		
4.3	**Monitoring of individual functions**		
4.3.1	**Synthesizer error messages**		
a	Apply low level to the following contacts: A43, SYTEST (X43.7)		
b	Measure DC voltage at A13, CBIT-TX-1 (X13.17).	≤ 1 V	
	Possible cause of fault: D906, D911, D955		
c	Check indication SYNT at REM bus PC.	◆	
	Possible cause of fault: D850, D840, D830, D803		

No.	Activity	Nominal value	Fault elimination
f	Increase voltage at A93, TEMP (X93.7) to 5.05 V.		
g	Apply low level to A13, *PTT-MIC (X13.15) and after a short delay remove (error reset).		
h	Measure DC voltage at A73, TEMP-1 (X73.24).	≥ 3.5 V	
	Possible cause of fault: D668		
i	Check indication TEMP at REM bus PC.	◆	
	Possible cause of fault: D840, D830		
j	Increase voltage at A93, TEMP (X93.7) to 5.5 V.		
k	Apply low level to A13, *PTT-MIC (X13.15) (error reset and carrier activation).		
l	Measure voltage at X960.2.	≤ 1 V	
	Possible cause of fault: N621, V675, N603, D603		
m	At A13, *PTT-MIC (X13.15) apply a high - low - high level sequence (error reset and carrier cut-out).		
4.3.4	**Supply voltage**		
a	Remove -10-V connection from A35, -10 V (X35.15).		
b	Apply low level to A13, *PTT-MIC (X13.15) (carrier activation).		
c	Measure voltage at A93, MOD (X93.16).	≤ 0.7 V	
	Possible cause of fault: V340, V337		
d	Remove low level from A13, *PTT-MIC (X13.15).		
e	Re-establish 10-V connection to A35, -10 V (X35.15).		
f	Reduce voltage at A35, + 24 V (X35.25) to 19 V.		

No.	Activity	Nominal value	Fault elimination
5.2.2	Measure voltage between X250.1 (+) and X250.2 (-) and by reducing (24 to 20 V) the voltage at A35, + 24 V (X35.25) set to 1.2 to 1.3 V.		
5.2.3	Measure reduced voltage at A35, + 24 V (X35.25).	20 to 21.5 V	
	Possible cause of fault: N621, V624, N250, N240		
5.2.4	Measure voltage between X250.1 (+) and X250.2 (-) and by increasing the voltage (24 to 35 V) at A35, + 24 V (X35.25) set to 1.2 to 1.3 V.		
5.2.5	Measure increased voltage at A35, + 24 V (X35.25).	31 to 33 V	
	Possible cause of fault: N621, V633		
5.2.6	Reduce voltage at A35, + 24 V (X35.25) to 24 V.		
5.2.7	Connect 5.2-V voltage at A93, TEMP (X93.7) and measure voltage between X250.1 (+) and X250.2 (-) and by increasing the voltage (5.2 to 5.4 V) at A93, TEMP (X93.7) set to 1.2 to 1.3 V.		
5.2.8	Measure increased voltage at A93, TEMP (X93.7).	5.25 to 5.38 V	
	Possible cause of fault: N621, V633		
5.2.9	Remove voltage from A93, TEMP (X93.7).		
5.2.10	Connect -1-V voltage at A73, AMP-RED (X73.14).		
5.2.11	Measure voltage between X250.1 (+) and X250.2 (-) and by increasing the voltage (-1 to -5 V) at A73, AMP-RED (X73.14) set to 1.2 to 1.3 V.		
5.2.12	Measure increased voltage at A73, AMP-RED (X73.14).	-3 to -5 V	
	Possible cause of fault: V662		

No.	Activity	Nominal value	Fault elimination
6.	**Modulation conditioning**		
6.1	ALC adaptation to limiter		
6.1.1	Set switch ALC of test set-up to position "OFF".		
6.1.2	Feed in signal with the following parameters between A73, AF-TX-A / C (X73.31) and A73, AF-TX-B / D (X73.32): Amplitude: 350 mV_{rms} / 600 Ω Frequency: 1 kHz		
6.1.3	Apply low level to A13, *PTT-MIC (X13.15) (carrier activation).		
6.1.4	Measure voltage at A93, DIRF (X93.1) (oscilloscope) and make a note of measured value (X).		
6.1.5	Set switch ALC of test set-up to position "ON".		
6.1.6	Measure voltage at A93, DIRF (X93.1). If necessary, align as follows: Check signal at A93, DIRF (X93.1) (visually on oscilloscope) and with potentiometer R125 align to limiter response threshold. Subsequently reduce level by 6 % with potentiometer R126. Possible cause of fault, if alignment is not successful: V112, N130, V130, V131, V223, V224	Value X - 5.5 to 6.5 %	
6.2	**Modulation depth**		
6.2.1	Feed in signal with the following parameters between A73, AF-TX-A / C (X73.31) and A73, AF-TX-B / D (X73.32): Amplitude: 60 mV_{rms} / 600 Ω Frequency: 1 kHz		

No.	Activity	Nominal value	Fault elimination
g	Measure AC voltage between A73, AF-TX (X73.19) and ground and with potentiometer R725 align to 1.85 V_{rms} (AC).		
h	Possible cause of fault, if alignment is not successful: N700		
6.2.4	Measure AC voltage at A73 AF-TX (X73.19) and align with potentiometer R254, if necessary.	1.85 V_{rms}	
	Possible cause of fault: N700		
6.2.5	Measure AC voltage at A13, AF-OUT (X13.16).	700 to 800 mV_{rms}	
	Possible cause of fault: N700		
6.2.6	Measure DC voltage at A13, DISM (X13.11).	2.45 to 2.65 V	
	Possible cause of fault: N710, V710		
6.2.7	Remove low level from A13, *PTT-MIC (X13.15).		
6.3	**AF control (ALC)**		
6.3.1	Feed in signal with the following parameters between A73, AF-TX-A / C (X73.31 and A73, AF-TX-B / D (X73.32) : Amplitude: 10 mV_{rms} / 600 Ω Frequency: 1 kHz		
6.3.2	Apply low level to A13, *PTT-MIC (X13.15) (carrier activation).		
6.3.3	Measure AC voltage at A93, DIRF (X93.1).	640 to 660 mV_{rms}	
	Possible cause of fault: N100, V112, N130, V130, V131		
6.3.4	Increase amplitude of input signal to 350 mV_{rms}.		

No.	Activity	Nominal value	Fault elimination
7.	**Other functions**		
7.1	**Modulation depth for power reduction**		
7.1.1	Feed in signal with the following parameters between A73, AF-TX-A / C (X73.31) and A73, AF-TX-B / D (X73.32): Amplitude: 60 mV_{rms} / 600 Ω Frequency: 1kHz		
7.1.2	Apply low level to A13, *PTT-MIC (X13.15) (carrier activation).		
7.1.3	Measure DC voltage between A93, DIRF (X93.1) (+) and A93, VREF (X93.2) (-) and by reducing the voltage at A35, + 24 V (X35.25) set to 0.3 VDC.		
7.1.4	Measure AC voltage at A93, DIRF (X93.1). Possible cause of fault: N230	194 to 217 mV_{rms}	
7.1.5	Remove low level from A13, *PTT-MIC (X13.15).		
7.1.6	Increase voltage at A35, + 24 V (X35.25) again to 24 V.		
7.2	**Distortion factor and (S + N) / N ratio**		
7.2.1	Feed in signal with the following parameters between A73, AF-TX-A / C (X73.31) and A73, AF-TX-B / D (X73.32): Amplitude: 60 mV_{rms} / 600 Ω Frequency: 1 kHz		
7.2.2	Apply low level to A13, *PTT-MIC (X13.15) (carrier activation).		
7.2.3	Measure distortion factor at A93, DIRF (X93.1).	0.2 to 0.5 %	Check acc. to 6.1 above, otherwise send for repair.

No.	Activity	Nominal value	Fault elimination
7.4.5	Apply high level to A73, ENABLE (X73.15).		
7.4.6	Measure voltage at A73, CBIT-TX-1 (X73.17).	≤ 1 V	
	Possible cause of fault: D929, D951		
7.4.7	Apply low level to A73, *VSWR-AMP (X73.7).		
7.4.8	Measure voltage at A73, VSWR-1 (X73.25).	≥ 3.5 V	
	Possible cause of fault: D929, D960, D930		
7.4.9	Remove low level from A73, *VSWR-AMP (X73.7).		
7.4.10	Apply low level to the following signals:		
	A73, TEST-AMP (X73.18), A73, *CAR-AMP (X73.17)		
7.4.11	Measure voltage at A73, CBIT-TX-1 (X73.17).	≥ 3.5 V	
	Possible cause of fault: D929, D951		
7.4.12	Apply high level to A73, AGC-EXT (X73.13).		
7.4.13	Measure voltage at A73, CBIT-TX-1 (X73.17).	≥ 3.5 V	
	Possible cause of fault: D929, D930, V312, D310		
7.4.14	Measure voltage at A93, MOD (X93.16).	1.75 to 1.85 VDC	
	Possible cause of fault: D310, V312, D929, D930		
8.	State of delivery		
8.1	Jumpers in order?		
8.2	Setting of modulation depth in order?		
8.3	Power setting in order?		
8.4	Modulator GM 201 in order!		

6.4.2 Fault in ON / OFF Control

No.	Activity / fault elimination	Nominal value
1	Measure voltage at D404.4 (*LOVOP).	≥ 3.5 V
	Possible cause of fault: V401, V404, D404	
2	Apply low level to A73, *OFF / ON (X73.40).	
3	Measure DC voltage at D404.8.	≥ 3.5 V
	Possible cause of fault: V410, D404	
4	Measure DC voltage at D405.1.	≤ 1 V
	Possible cause of fault: D405	
5	Measure DC voltage at D404.6.	≥ 3.5 V
	Possible cause of fault: D404	
6	Measure DC voltage at D405.13 and A35, ON-TX (X35.20).	≤ 1 V
	Possible cause of fault: D405	

6.4.3 Fault in PTT Control

No.	Activity / fault elimination	Nominal value
1	Measure DC voltage at D520.13.	≥ 3.5 V
	Possible cause of fault: D902, D922	
2	Apply low level to A13, *PTT-MIC (X13.15).	
3	Measure DC voltage at D503.2.	≥ 3.5 V
	Possible cause of fault: D503	
4	Measure DC voltage at D505.12.	≤ 1 V
	Possible cause of fault: D505	

6.4.4 Fault in Monitoring Unit

No.	Activity / fault elimination	Nominal value
1.	**Monitoring unit** **branch: ERROR (stored errors)**	
1.1	Configure jumpers as follows: X971.2 ⇒ X971.3 (*VSWR), X972.2 ⇒ X972.3 (CAR-OK). **(errors VSWR and CAR stored)** ⇒ = jumper, / = open	
1.2	Measure DC voltage at D906.2 (CAR-OK). Possible cause of fault: D906, otherwise continue with No. 2 below.	≥ 3.5 V
1.3	Measure DC voltage at D906.3 (*VSWR). Possible cause of fault: D906, otherwise continue with No. 2 below.	≥ 3.5 V
1.4	Measure DC voltage at D906.4 (TEMP). Possible cause of fault: V902, D902, D906	≥ 3.5 V
1.5	Measure DC voltage at D906.5 (SYTEST). Possible cause of fault: D906	≥ 3.5 V
1.6	Measure DC voltage at D906.6 (*PAERR). Possible cause of fault: D906	≥ 3.5 V
1.7	Measure DC voltage at D906.11 (AMTEST). In the case of a fault continue with No. 3 below.	≥ 3.5 V
1.8	Measure voltage at D955.6 with oscilloscope, remove low level from A13, *PTT-MIC (X13.15) and after a short delay apply again (error reset). Possible cause of fault: D902, D955	short low pulse
1.9	Other causes of fault: D906, D911	

No.	Activity / fault elimination	Nominal value
2.9	Measure DC voltage at D951.13.	≥ 3.5 V
	Possible cause of fault: D951	
2.10	Measure DC voltage at D930.13.	≥ 3.5 V
	Possible cause of fault: D960, D930	
2.11	Measure DC voltage at D929.6.	≥ 3.5 V
	Possible cause of fault: D960, D930, D929	
2.12	Other possible causes of fault: D911, D955	
3.	**Monitoring unit branch: monitoring of modulation output**	
3.1	Apply low level to A13, *PTT-MIC (X13.15) (carrier activation).	
3.2	Increase voltage at A93, MOD-Imax and observe voltage at A93, IMOD. Measure voltage at X960.2.	When the voltage IMOD reaches 0.4 to 0.8 V the voltage at X960.2 will change from ≥ 3.5 V to ≤ 1 V.
	Possible cause of fault: V352, N603, D603, D668	
3.3	Remove low level from A13, *PTT-MIC (X13.15) and after a short delay apply again (error reset).	
3.4	Increase voltage at A93, MOD-Vmax (max. 10 V!) and observe voltage at X960.2.	The voltage at X960.2 changes from ≥ 3.5 V to ≤ 1 V.
	Possible cause of fault: V347, N611, V662	
3.5	Remove low level from A13, *PTT-MIC (X13.15) and after a short delay apply again (error reset).	

6.5 Replacement of Components

WARNING

Do not open the module and remove any components unless the voltage is switched off.

6.5.1 Opening Modulator GM 201

Undo and remove twelve Phillips screws on each of the screening covers and take off screening covers.

6.5.2 Replacement of Individual Components

WARNING

Do not remove any components from Modulator GM 201 unless the voltage is switched off.

The replacement of components is to be carried out in line with common workshop practice. No special instructions are needed.

However, the modulator contains electrostatically sensitive devices (ESD) and surface-mounted devices (SMD).

Take note of the following:

CAUTION

For the replacement of electrostatically sensitive devices, such as MOS, MOSFET components etc., a special CMOS work station is required.

Note:

- *During soldering on PCBs the metal foil may come away from the basic material if too much heat is applied. For this reason soldering times should be kept as short as possible.*
- *Charred, melted or burnt components, wire insulations or PCBs must be replaced. Components, discoloured as a result of heat, must be thoroughly checked in order to determine whether their technical characteristics were impaired. If so, the respective components must be replaced.*
- *Printed circuits, showing mechanical damage or broken tracks, must also be replaced.*

The replacement of SMDs or other miniature components follows common workshop practice. Special instructions are not needed.

Use the following tools for the replacement of SMDs:

- SMD soldering station,
- SMD desoldering station,
- SMD solder compound and
- SMD fitting tools such as
  - vacuum tool,
  - pair of pliers,
  - pair of pincers.

For the replacement of conventional components use standard soldering and desoldering tools.

Following the replacement of components it is absolutely essential to carry out the final test according to 6.6.

6.5.3 Closing the Modulator

Close the module in the reverse order to opening it.

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Radio Communications Division

Appendix

INTERFACE DESCRIPTION
CIRCUIT DIAGRAMS
PARTS LISTS
COMPONENTS LAYOUTS

Connector X13

Contact	Signal Name	Signal Description	Direction	Type	Range of Value	Remarks
X13.1	+5 V		output	power	4.5 to 4.5 V	from X35.19
X13.2	GND					
X13.3	+10 V		output	power	9.9 V to 10.1 V	from X35.17
X13.4	-10 V		output	power	-11 to -9 V	from X35.15
X13.5	not used					
X13.6	+18 V		output	power	17 to 19 V	from X35.13/16
X13.7	not used					
X13.8	AF-MIC-A	AF input (+)	input	analog	0 to 1.5 V_{rms} ref. to X13.8 R_i = 55 kΩ	nominal level 130 mV_{rms}
X13.9	AF-MIC-B	AF input (-)	input	analog		
X13.10	*PTT	carrier activation	output	low	low ≤ 0.4 V high ≥ 3.5 V max. 1 mA	low: PTT
X13.11	DISM	modulation display	output	analog	0 to +4 V ±0.1 V R_L ≥ 1 MΩ	
X13.12	DISF	power display	output	analog	0 to +4 V ±0.1 V R_i ≥ 10 kΩ	
X13.13	DISR	VSWR display	output	analog	0 to +4 V ±0.1 V R_i ≥ 10 kΩ	
X13.14	GND					
X13.15	*PTT-MIC	PTT from display board	input	low	low ≤ 1.8 V high ≥ 7 V or open	low: PTT
X13.16	AF-HEAD	AF to display board	output	analog	0 to 0.8 V_{rms} ±0.05 V R_i = 150 Ω	X1.2-3 P_t = full power m = 90 %
X13.17	CBIT-TX-1	sum test	output	high	low ≤ 0.7 V high ≥ 3.5 V max. 7 mA	high: no error
X13.18	*REMOTE-1	remote operation	input	low	low ≤ 0.4 V high ≥ 3.5 V or open	low: remote
X13.19	DC-LED		output	high	4.5 to 5.5 V	from X35.10
X13.20	AC-LED		output	high	4.5 to 5.5 V	from X35.11

Cable X35

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X35.1	GND					
X35.2	AF-OPT-1	AF to option board	output	analog	0 to 2 V_{rms}	nominal level: 200 mV_{rms}
X35.3	AF-OPT-1	AF option board	bidirec.	analog	see jumper X10	nominal level: 550 mV_{rms}
X35.4	GND					
X35.5	AF-OPT-3	AF option board	bidirec.	analog	see jumper X10	nominal level: 550 mV_{rms}
X35.6	not used					
X35.7	AF-OPT-4	AF option board	bidirec.	analog	see jumper X10	nominal level: 550 mV_{rms}
X35.8	*PTT-VOX	PTT from option board	input	low	low ≤ 0.9 V high ≥ 3.5 V	low: PTT
X35.9	GND					
X35.10	AC-LED		input	high	4.5 to 5.5 V < 1 mA	to X73.43, X13.19
X35.11	DC-LED		input	high	4.5 to 5.5 V	to X73.42, X13.20
X35.12	+ 8 V		input	power	7.5 to 8.5 V < 1 A	to X93 11/12
X35.13	+ 18 V	operating voltage	input	power	17 to 19 V < 0.5 A	without PTT < 10 mA
X35.14	+ 8 V		input	power	7.5 to 8.5 V < 1 A	
X35.15	-10 V	operating voltage	input	power	-11 to -9 V < 50 mA	
X35.16	+ 18 V	operating voltage	input	power	17 to 19 V < 0.5 A	
X35.17	+ 10 V	operating voltage	input	power	9.9 to 10.1 V < 50 mA	
X35.18	not used					
X35.19	+ 5 V	operating voltage	input	power	4.5 to 5.5 V < 30 mA	

Cable X35 (continued)

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X35.20	ON-TX	switch-on of DC section	output	high	low ≤ 0.4 V high ≥ 3.5 V max. 1 mA	high: on
X35.21	GND					
X35.22	VOPSW		input	power	0 to 35 V	to X73.4
X35.23	VOPSW		input	power	0 to 35 V	
X35.24	GND					
X35.25	+ 24 V		input	power	0 to + 35 V < 15 mA	to X73.20
X35.26	not used					

Connector X43

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X43.1	GND					
X43.2	not used					
X43.3	+ 18 V		output	power	17 to 19 V	from X35.13/16
X43.4	not used					
X43.5	GND					
X43.6	not used					
X43.7	SYTEST	synthesizer CBIT	input	high	low ≤ 0.4 V high ≥ 3.5 V or open	
X43.8	not used					
X43.9	*PTT	carrier activation	output	low	low ≤ 0.4 V high ≥ 3.5 V max. 1 mA	
X43.10	not used					

Connector X73

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X73.1	*PLOW	low power	input	low	low ≤ 0.4 V high ≥ 3.5 V or open	low: low power
X73.2	BLW-1	blower on	output	high	low ≤ 0.5 V high + 10 V across R = 10 kΩ	high: blower on
X73.3	*PHIGH	external power amplifier on	input	low	low ≤ 0.4 V high ≥ 3.5 V or open	low: external power amplifier on
X73.4	VOP-SW		output	power	0 to 35 V	from X35.22 / 23
X73.5	*OFF-1	remote switch-off (wire)	input	low	low ≤ 0.4 V high ≥ 3.5 V or open	low: OFF for remote operation
X73.6	NOPTT	PTT inhibit	input	high	low ≤ 0.9 V high ≥ 3.5 V	high: PTT inhibit
X73.7	*VSWR-AMP	VSWR from external power amplifier	input	low	low ≤ 0.9 V high ≥ 3.5 V or open	low: power amplifier signals VSWR
X73.8	*PTT-INT	PTT (wire)	input	low	low ≤ 1.8 V high ≥ 3.5 V	low: PTT
X73.9	*OFF-TX-1	switch-off of standby unit	output	low	low ≤ 0.4 V high max. 35 V / 1 mA	low: standby off (open collector)
X73.10	*OFF-TX-2	switch-off from standby unit	input	low	low ≤ 0.4 V high ≥ 3.5 V or open	low: off
X73.11	AGC-	external directional coupler (-)	input	analog	0 to + 5 V < 1 mA	
X73.12	AGC +	external directional coupler (+)	input	analog	0 to + 5 V < 1 mA	1.00 V ref. to X73.11: nominal power
X73.13	AGC-EXT	external control loop	input	high	low ≤ 0.9 V high ≥ 3.5 V	high: external
X73.14	AMP-RED	analog power reduction	input	output	-10 to + 10 V < 2mA	-10 V: maximum reduction

Connector X73 (continued)

Contact	Signal Name	Signal Description	Direction	Type	Range of Value	Remarks
X73.15		ENABLE external power amplifier ready	input	high	low ≤ 0.9 V high ≥ 3.5 V	high: ready
X73.16		PTT-AMP PTT for external power amplifier	output	high	low ≤ 0.7 V high ≥ 3.5 V max. 1 mA	high: PTT for external power amplifier
X73.17		*CAR-AMP carrier message external power amplifier	input	low	low ≤ 0.9 V high ≥ 3.5 V or open	low: carrier > limit
X73.18		TEST-AMP external power amplifier sum test	input	low	low ≤ 0.9 V high ≥ 3.5 V or open	low: Go external power amplifier
X73.19		AF-TX AF from directional coupler	output	analog	0 to 2 V_{rms} / 600 Ω	
X73.20		+ 24 V	output	power	0 to + 35 V	from X37.25
X73.21		CBIT-TX-1 sum test transmitter	output	high	low ≤ 0.7 V high ≥ 3.5 V max. 1 mA	high: no error
X73.22		*REMOTE-1 remote switch	input	low	low ≤ 0.9 V high ≥ 3.5 V or open	low: remote
X73.23		not used				
X73.24		TEMP-1 over-temperature	output	high	low ≤ 0.4 V high ≥ 3.5 V max. 1 mA	high: over-temperature
X73.25		VSWR-1 VSWR above threshold	output	high	low ≤ 0.4 V high ≥ 3.5 V max. 1 mA	high: VSWR
X73.26		CARRIER-1 carrier above threshold	output	high	low ≤ 0.4 V high ≥ 3.5 V max. 1 mA	high: carrier approx. > P_{max} / 4
X73.27		CBIT-RX-1 sum test receiver	input	high	low ≤ 0.4 V high ≥ 3.5 V or open	high: no error
X73.28		PTT carrier activation	output	high	low ≤ 0.4 V high ≥ 3.5 V max. 1 mA	high: PTT

Connector X73 (continued)

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X73.29 X73.30	GND					
X73.31	AF-TX-A/C	AF input	input	analog	0 to 600 mV_{rms} ref. to X73.13	nominal level: 60 mV_{rms}
X73.32	AF-TX-B/D		input	analog		return line for X73.31
X73.33 X73.34	GND					
X73.35	*PTT-INB	PTT from inband interface	input	low	low ≤ 0.9 V high ≥ 3.5 V or open	low: PTT
X73.36 X73.37	not used					
X73.38	*OFF-INB	remote off from inband interface	input	low	low ≤ 0.9 V high ≥ 3.5 V or open	low: off
X73.39	AF-RX	receiver AF	input	analog	max. 0.2 V_{rms}	nominal level: 100 mV_{rms}
X73.40	*OFF / ON	OFF switch on front panel	input	low	low ≤ 0.4 V high ≥ 3.5 V	low: off
X73.41	not used					
X73.42	DC-LED		output	high	4.5 to 5.5 V	from X35.11
X73.43	AC-LED		output	high	4.5 to 5.5 V	from X35.10
X73.44	ON-TX	switch-on DC supply	output	high	low ≤ 0.4 V high ≥ 3.5 V max. 1 mA	high: ON
X73.45	*SDAI	serial output	output	digital	low ≤ 0.4 V high ≥ 3.5 V	across 3.32 kΩ
X73.46	SEL-0	address output	output	digital	low ≤ 0.4 V high max. 35 V < 1 mA	open collector
X73.47	SDAO	serial data input	input	digital	low ≤ 0.9 V high ≥ 3.5 V	
X73.48	SCL	clock input	input	digital	low ≤ 0.9 V high ≥ 3.5 V	
X73.49 X73.50	GND					

Connector X93

Contact	Signal Name	Signal Description	Direction	Type	Range of Value	Remarks
X93.1	DIRF	forward power	input	analog	4.5 to 8 V	1.00 V ref. to X93.2: nominal power
X73.2	VREF	reference for directional coupler	output	power	4.5 to 5.5 V	across 10 Ω
X73.3	DIRR	reflected power	input	analog	4.5 to 8 V	1.00 V ref. to X93.2: VSWR = ∞
X73.4	GND			low		
X73.5	+ 10 V		output	power	9.9 to 10.1 V	reference voltage from X35.17
X73.6	+ 5 V		output	power	4.5 to 5.5 V	from X35.19
X73.7	TEMP	heat sensor	input	analog	0 to 10 V	4 V ≡ 25 °C ± 3 K
X73.8	GND					
X73.9	*PTT-A	carrier activation	output output	low	low ≤ 0.5 V high max. 35 V < 5 mA	low: PTT open collector
X73.10	*PAERR	error signal from amplifier	input	low	low ≤ 0.9 V high ≥ 3.5 V or open	low: error
X73.11	+ 8 V		output	power	7.5 to 8.5 V	from X35.12/14
X73.12	+ 8 V		output	power	7.5 to 8.5 V	from X35.12/14
X73.13	GND					
X73.14	+ 18 V		output	power	17 to 19 V	from X35.13/16
X73.15	GND					
X73.16	MOD	modulation voltage	output	analog	0 to 12 V < 400 mA	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
.	XX VARIANTENERKLAERUNG IDENTIFICATION OF MODELS VAR 02 = GRUNDAUSFUHRUNG MOD 02 = BASIC MODEL VAR 03 = USER BIT MOD 03 = USER BIT				
..	ZUG.PROD.DOC./ADDIT.DOCUM ADDITIONAL DOCUMENT				
...	ZUGEH.STROML./CIRC.DIAGR. CIRC.DIAGR. 6044.6048S				
A1	ED MODULATOR BOARD MODULATOR BOARD NUR VAR/ONLY MOD: 02	6044.6048.02			
A1	ED MODULATORBOARD NUR VAR/ONLY MOD: 03	6044.6248.02			

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
.	XX VARIANTENERKLAERUNG IDENTIFICATION OF MODELS VAR 02 = GRUNDAUSFUEHRUNG MOD 02 = BASIC MODEL				
C100	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C101	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C105	CC 150PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8509.00	VITRAMON	VJ1206 A 151 F AT	
C112	CC 2,2NF+-10%50VX7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8444.00	VITRAMON	VJ1206 Y 222 K AT	
C114	CE 4,7UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7230.00	PANASONIC	ECS-T1ED475KR	
C121	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C126	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C135	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C160	CC 1,5NF+-1% 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0007.7417.00	VITRAMON	VJ1206 A 152 F AT	
C161	CC 1,5NF+-1% 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0007.7417.00	VITRAMON	VJ1206 A 152 F AT	
C164	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C165	CC 270PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8867.00	VITRAMON	VJ1206 A 271 F AT	
C171	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C172	CC 47PF+-1%50V COG 1206 CERAMIC CHIP CAPACITOR	CC 0099.8496.00	VITRAMON	VJ1206 A 470 F AT	
C176	CK 22NF +-1% 63V RM5 KP POLYPROPYLENE CAPACITOR	CK 0007.7675.00	ROEDERSTEI	KP1830-322 06 1 3 W	
C178	CC 82PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8821.00	VITRAMON	VJ1206 A 820 F AT	
C180	CC 1,5NF+-1% 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0007.7417.00	VITRAMON	VJ1206 A 152 F AT	
C181	CC 1,5NF+-1% 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0007.7417.00	VITRAMON	VJ1206 A 152 F AT	
C200	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C201	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C227	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C230	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C231	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C232	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C233	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C234	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C241	CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8415.00	VITRAMON	VJ1206 A 101 F AT	
C250	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C261	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C265	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C305	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C306	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C307	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C316	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	
C317	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	
C323	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C324	CC 330PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8873.00	VITRAMON	VJ1206 A 331 F AT	
C325	CC 330PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8873.00	VITRAMON	VJ1206 A 331 F AT	
C328	CE 100UF+-20%63V RM5 ELECTROLYTIC CAPACITOR	CE 0008.7879.00	PANASONIC	ECA 1 JFG 101 BQ	
C329	CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8415.00	VITRAMON	VJ1206 A 101 F AT	
C330	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C348	CE 1UF +-10% 25V EIA3528 TANTALUM SMD-CAPACITOR	CE 0007.7217.00	SPRAGUE EL	293D 105 X9 025 B2T	
C352	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C404	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C410	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C411	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C421	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C431	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C503	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C505	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C507	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C512	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C514	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C520	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C522	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C531	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C535	CC 33NF+-10% 50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5172.00	VITRAMON	VJ 1206 Y 333 K XAT	
C538	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C621	CC 33NF+-10% 50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5172.00	VITRAMON	VJ 1206 Y 333 K XAT	
C627	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	VALVO	2222 195 65108	
C629	CE 4,7U F+-10% 10V 3528 TANTALUM SMD-CAPACITOR	CE 0007.7275.00	SPRAGUE EL	293D 475 X9 010 B2T	
C631	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C637	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C645	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C646	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C652	CC 33NF+-10% 50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5172.00	VITRAMON	VJ 1206 Y 333 K XAT	
C662	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C667	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C668	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C675	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C681	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C684	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C703	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C705	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C708	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C710	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	VALVO	2222 195 65108	
C715	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C803	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE EL	293D X9 010 D2T	
C851	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C861	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C862	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C906	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C910	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C913	CE 2,2UF +-10% 10V 3528 TANTALUM SMD-CAPACITOR	CE 0007.7269.00	VALVO	2222 195 68228	
C921	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C925	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C929	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C933	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C937	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C941	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C945	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C950	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C951	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C953	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	VALVO	2222 195 65108	
C970	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	VALVO	2222 195 65108	
D310	BL PC74HC4053T 3X2CH.MUX MULTIPLEXER	BL 0804.0948.00	PHILIPS SE	74HC4053D	
D404	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D405	BL PC74HC02T 4X2IN.NORG QUAD 2INPUT NOR GATE	BL 0007.3470.00	PHILIPS SE	74HC02D	
D503	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D505	BL PC74HCT27T 3X3IN NORG NOR GATE	BL 0007.6227.00	PHILIPS SE	74HCT27D	
D520	BL PC74HCT00T 4X2IN.NAND NAND GATE	BL 0007.6156.00	PHILIPS SE	74HCT00D	
D522	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D538	BL PC74HCT4060T 14B.COUNT BINARY COUNTER W.OSZILL.	BL 0007.6856.00	PHILIPS-CO	PC74HCT4060T	
D603	BL PC74HCT10T 3X3IN NAND NAND GATE	BL 0007.6185.00	PHILIPS SE	74HCT10D	
D668	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D803	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D810	BC PCF8574AT 8BIT-EXPAND IC I2C-BUS I/O-EXPANDER	2031.3862.00	PHILIPS	PCF8574AT	
D820	BC PCF8574T 8B-I/O-PORT IC 8BIT I/O-PORT I2C-BUS	2033.1496.00	PHILIPS	PCF8574T	
D830	BC PCF8574T 8B-I/O-PORT IC 8BIT I/O-PORT I2C-BUS	2033.1496.00	PHILIPS	PCF8574T	
D840	BL PC74HC245T 8XTRANSC. OCTAL TRANSCEIVER TRIST.	BL 0007.3563.00	PHILIPS SE	74HC245D	
D850	BL PC74HCT112T 2XJK-FF CL DUAL JK-FF	BL 0007.6327.00	PHILIPS-CO	PC74HCT112T	
D860	BL PC74HCT4060T 14B.COUNT BINARY COUNTER W.OSZILL.	BL 0007.6856.00	PHILIPS-CO	PC74HCT4060T	
D870	BL PC74HCT32T 4X2IN ORG QUAD 2INPUT OR GATE	BL 0007.5389.00	PHILIPS SE	74HCT32D	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
D902	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D906	BL PC74HC30T 1X8IN NAND NAND GATE	BL 0804.1144.00	PHILIPS SE	74HC30D	
D911	BL PC74HCT20T 2X4IN.NAND NAND GATE	BL 0007.6210.00	PHILIPS-CO	PC74HCT20T	
D929	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D930	BL PC74HCT02T 4X2IN NORG QUAD 2INPUT NORGATE	BL 0007.5366.00	PHILIPS SE	74HCT02D	
D951	BL PC74HCT02T 4X2IN NORG QUAD 2INPUT NORGATE	BL 0007.5366.00	PHILIPS SE	74HCT02D	
D955	BL PC74HCT00T 4X2IN.NAND NAND GATE	BL 0007.6156.00	PHILIPS SE	74HCT00D	
D960	BL PC74HCT02T 4X2IN NORG QUAD 2INPUT NORGATE	BL 0007.5366.00	PHILIPS SE	74HCT02D	
JVL1	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
JVL2	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
N100	BO TL074AID 4XFET OPAMP QUAD OPAMP	6014.4376.00	TEXAS INST	TL074AI(D)	
N130	BO LM2901D 4X COMPAR COMPARATOR	0007.7875.00	SIGNETICS	LM 2901D	
N200	BO TL074AID 4XFET OPAMP QUAD OPAMP	6014.4376.00	TEXAS INST	TL074AI(D)	
N230	BO SA578D 90DB-KOMPANDER IC COMPANDOR	6044.6090.00	PHILIPS	SA578D	
N240	BO OP27GZ LN OPAMP OPERATIONAL AMPLIFIER	BO 0393.2599.00	ANALOG DEV	OP27GP	
N250	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
N316	BO OP27GZ LN OPAMP OPERATIONAL AMPLIFIER	BO 0393.2599.00	ANALOG DEV	OP27GP	
N322	BO OP27GZ LN OPAMP OPERATIONAL AMPLIFIER	BO 0393.2599.00	ANALOG DEV	OP27GP	
N603	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
N611	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
N621	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
N700	BO TL074AID 4XFET OPAMP QUAD OPAMP	6014.4376.00	TEXAS INST	TL074AI(D)	
N710	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
R100	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R101	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R102	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R103	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R104	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R105	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R110	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R111	RG 1,5 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5714.00	DALE	CRCW1206-10 1K5 F-T	
R112	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R113	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R114	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R120	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R121	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R122	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	

0693

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R124	RG 392 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6056.00	DALE	CRCW1206-10 392K F-T	
R125	RG 2,21KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5743.00	DALE	CRCW1206-10 2K21 F-T	
R126	RS 0,5W10KOHM+-10%10X10X5 CERMET POTENTIOMETER T	RS 0247.7903.00	BOURNS	3386F-1-103	
R127	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	
R130	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R131	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R132	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R133	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R134	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R135	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R160	RG 432 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6062.00	DALE	CRCW1206-10 432K F-T	
R161	RG 511 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6085.00	DALE	CRCW1206-10 511K F-T	
R163	RG 182 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5989.00	DALE	CRCW1206-10 182K F-T	
R164	RG 182 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5989.00	DALE	CRCW1206-10 182K F-T	
R165	RG 200 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5995.00	DALE	CRCW1206-10 200K F-T	
R166	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R170	RG 274 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.4460.00	DALE	CRCW1206-10 274K F-T	
R171	RG 274 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.4460.00	DALE	CRCW1206-10 274K F-T	
R172	RG 243 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6010.00	DALE	CRCW1206-10 243K F-T	
R173	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R175	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R176	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R177	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	
R178	RG 3,32KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5789.00	DALE	CRCW1206-10 3K32 F-T	
R179	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R181	RG 182 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5989.00	DALE	CRCW1206-10 182K F-T	
R182	RG 1,2MOHM+-5%TK200 1206 CHIP RESISTOR	0007.9949.00	ROEDERSTEI		
R220	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R221	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R222	RG 68,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1902.00	DALE	CRCW1206-10 68K1 F-T	
R223	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R224	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R226	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R227	RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5720.00	DALE	CRCW1206-10 1K82 F-T	
R231	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R233	RG 5,62KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0735.00	DALE	CRCW1206-10 5K62 F-T	
R235	RG 20,0KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5866.00	DALE	CRCW1206-10 20K F-T	
R237	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R240	RG 6,81KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0758.00	DALE	CRCW1206-10 6K81 F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R241	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R250	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R251	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R252	RG 18,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5850.00	DALE	CRCW1206-10 18K2 F-T	
R254	RS 0,3W 50KOHM+-10%CERMET CERMET POTENTIOMETER	RS 0086.7967.00	BOURNS	3292X-1-50 KOHM+-10%	
R260	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R261	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R263	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R264	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R265	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R303	RS 0,3W 20KOHM+-10%CERMET CERMET POTENTIOMETER	RS 0086.7950.00	BOURNS	3292X-1-20 KOHM+-10%	
R304	RS 0,3W 50KOHM+-10%CERMET CERMET POTENTIOMETER	RS 0086.7967.00	BOURNS	3292X-1-50 KOHM+-10%	
R307	RG 10,0 OHM+-1%TK100 1206 CHIP -RESISTOR	RG 0006.8649.00	DALE	CRCW1206-10 10R F-T	
R310 ..314	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R315	RG 8,25KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0770.00	DALE	CRCW1206-10 8K25 F-T	
R316	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R317	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R318	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R320	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R322	RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5566.00	DALE	CRCW1206-10 47R5 F-T	
R323	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R324	RG 475 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5695.00	DALE	CRCW1206-10 475R F-T	
R325	RG 475 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5695.00	DALE	CRCW1206-10 475R F-T	
R326	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R327	RG 2,21KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5743.00	DALE	CRCW1206-10 2K21 F-T	
R329	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R330	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R340	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R341	RG 82,5KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1925.00	DALE	CRCW1206-10 82K5 F-T	
R342	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R347	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R348	RG 1,OMOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R350	RG 3,32OHM+-1%TK100 1206 CHIP-RESISTOR	RG 0007.8388.00	PHILIPS	RC 02	
R351	RG 3,32OHM+-1%TK100 1206 CHIP-RESISTOR	RG 0007.8388.00	PHILIPS	RC 02	
R352	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R354	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R355	RG 121,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1960.00	DALE	CRCW1206-10 121K F-T	
R401	RG 2,21KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5743.00	DALE	CRCW1206-10 2K21 F-T	
R402	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R404	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R405	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R410	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R411	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R420	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R421	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R432	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R433	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R435	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R440	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R501	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R502	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R503	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R504	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R505	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R507	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R510	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R511	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R512	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R513	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R515	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R520	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R522	RG 150 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5972.00	DALE	CRCW1206-10 150K F-T	
R523	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R524	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R530	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R531	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R532	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R533	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R534	RL 0,60W 47,5KOHM+-1%TK50 RESISTOR	RL 0083.1800.00	DRALORIC	SMA/207/47,5K-F-C	
R535	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R538	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R601	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R602	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R603	RG 475 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6079.00	DALE	CRCW1206-10 475K F-T	
R604	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R605	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R606	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R607	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R610 ..613	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R620	RG 56,2KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1883.00	DALE	CRCW1206-10 56K2 F-T	
R621	RG 475 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6079.00	DALE	CRCW1206-10 475K F-T	
R623	RG 150 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5972.00	DALE	CRCW1206-10 150K F-T	
R624	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	
R625	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R626	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	F
R626	RG 130,OKOH+-1%TK100 1206 RESISTOR CHIP	RG 0007.5966.00	DALE	CRCW1206-10 130K F-T	
R627	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R628	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R629	RG 13,OKOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5837.00	DALE	CRCW1206-10 13K F-T	
R630	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R631	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R632	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R633	RG 475 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6079.00	DALE	CRCW1206-10 475K F-T	
R635	RG 3,01KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5772.00	DALE	CRCW1206-10 3K01 F-T	
R636	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R637	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R641	RG 15,OKOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5843.00	DALE	CRCW1206-10 15K F-T	
R642	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R650	RS 0,5W100KOHM+-10%10X10X CERMET POTENTIOMETER T	RS 0087.7583.00	BOURNS	3386F 100KOHM	
R651	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R652	RG 1,OMOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R662	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R663	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R664	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R665	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R666	RG 1,OMOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R667	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R668	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R671	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R672	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R673	RG 15,OKOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5843.00	DALE	CRCW1206-10 15K F-T	
R674	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R675	RG 56,2KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1883.00	DALE	CRCW1206-10 56K2 F-T	
R676	RG 1,OMOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R677	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R678	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R680	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R681	RG 150 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5972.00	DALE	CRCW1206-10 150K F-T	
R682	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R683	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R684	RG 150 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5972.00	DALE	CRCW1206-10 150K F-T	
R690	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R691	RG 1,OMOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R692	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R693	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R694	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	
R701	RG 12,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0841.00	DALE	CRCW1206-10 12K1 F-T	
R702	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R703	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R706	RG 12,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0841.00	DALE	CRCW1206-10 12K1 F-T	
R707	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R708	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R709	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R710	RG 121,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1960.00	DALE	CRCW1206-10 121K F-T	
R711	RG 68,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1902.00	DALE	CRCW1206-10 68K1 F-T	
R715	RG 475 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6079.00	DALE	CRCW1206-10 475K F-T	
R716	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R717	RG 18,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5850.00	DALE	CRCW1206-10 18K2 F-T	
R720	RG 15,OKOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5843.00	DALE	CRCW1206-10 15K F-T	
R721	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R722	RG 150 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5589.00	DALE	CRCW1206-10 150R F-T	
R725	RS 0,5W5OKOHM+-10%10X10X5 CERMET POTENTIOMETER	RS 0247.7910.00	BOURNS	3386F-1-503	
R726	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R727	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R728	RG 562 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9068.00	DALE	CRCW1206-10 562R F-T	
R801	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R802	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R803	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R804	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R805	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R806	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R807	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R809	RG 3,32KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5789.00	DALE	CRCW1206-10 3K32 F-T	
R810	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R811	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R812	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R815	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R816 ..818	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R825	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R841	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R850	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R851	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R860	RG 1,OMOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R861	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R862	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R863	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R901	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R902	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R904	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R905	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R906	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R908	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R909	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R910	RG 1,OMOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R911	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R913	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R914	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R922	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R923	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R926	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R927	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R928	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R929	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R932	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R933	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R936	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R937	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R940	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R941	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R944	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R945	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R950	RG 10,O OHM+-1%TK100 1206 CHIP -RESISTOR	RG 0006.8649.00	DALE	CRCW1206-10 10R F-T	
R951	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R952	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R953	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R954	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R960	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R970	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R971	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R972	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
V112	AM SST4393 35V JFET JFET	0828.4737.00	SILICONIX	SST4393	
V130	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V131	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V223	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V224	AD BAV70 70V DUO UDI DUAL DIODE COMMON CATHODE	0007.9278.00	PHILIPS-CO	BAV70	
V250	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V265	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V312	AM BSS123 N-E 100V MOSF FET	0815.7961.00	SIEMENS	BSS 123 E-6327	
V320	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V326	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V327	AE BZV55/C12 0,5W ZDI ZENER DIODE	AE 0006.9897.00	PHILIPS SE	BZV55B12	
V330	AL BD139 N 80V 1AO TRANSISTOR	AL 0274.8994.00	PHILIPS-CO	BD139	
V337	AM BSP108 N-E 80V DMOS MOSFET	6024.3008.00	PHILIPS	BSP108	
V340	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V347	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V352	AK BCX71J P 45V 200MA TRANSISTOR	AK 0007.2096.00	PHILIPS-CO	BCX71J	
V401	AE BZV55/C18 0,5W ZDI ZENER DIODE	AE 0006.9916.00	PHILIPS SE	BZV55B18	
V404	AE BZV55/C5V1 0.5W ZDI ZENER DIODE	AE 0006.9839.00	PHILIPS SE	BZV55B5V1 GEG	
V410	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V411	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V420	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V435	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V440	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V510	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V523	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V524	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V531	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V532	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V605	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V624	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V633	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V640	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V662	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
V664	AE HSMS2800 SCHOTTKY DIODE	AE 0836.8421.00	HEWLETT-PA	HSMS2800	
V674	AE HSMS2800 SCHOTTKY DIODE	AE 0836.8421.00	HEWLETT-PA	HSMS2800	
V675	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V677	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V703	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V708	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V710	AD BAV99 70V DUO UDI DIODE	AD 0911.0092.00	PHILIPS-CO	BAV99	
V807	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V815	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V820	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V821	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V840	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V860	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V902	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V905	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V913	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V923	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V927	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V941	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
X10	FP STECKERLEISTE 12POL CONNECTOR 12P	FP 0701.5231.00	BERG	75844-102-12	
X13	FP STECKERLEISTE 20P.GER CONNECTOR 20P	FP 0351.3468.00	SIEMENS	V23535-A2200-A202	
X30	FP LEITERPLATTENVERB.26P PRINTEDBOARD	FP 0355.0063.00	ODU	533.065.024.026	6044.6077.00
X31	FP BUCHSENLEISTE 26POL. FEMALE CONNECTOR 26-WAY	FP 0344.4640.00	SIEMENS	V23535-A3280-C261 +	6044.6077.00
X35	DY FLACHBANDKABEL	6044.6077.00			
X35	FP BUCHSENLEISTE 26POL. FEMALE CONNECTOR 26-WAY	FP 0344.4640.00	SIEMENS	V23535-A3280-C261 +	6044.6077.00
X43	FP STECKERLEISTE 10P.GER CONNECTOR 10P	0846.4593.00	SIEMENS	V23535-A2200-A102	
X73	FP STECKERLEISTE 50P.GER CONNECTOR 50P.	FP 0099.9434.00	SIEMENS	V23535-A1200-A502	
X93	FP STECKERLEISTE 16P.GER CONNECTOR	FP 4007.2304.00	SIEMENS	V23535-A2200-A162	
X110	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X227	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
X240	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
X250	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X322	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X323	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X404	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
X404	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X410	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X411	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR 2-POLIG	FP 0242.3600.00	BINDER	742-11-0179-00-36	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
X532	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X538	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	F
X538	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X715	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X812	FP STECKERLEISTE 8P. CONNECTOR 8P	FP 4006.9592.00	BINDER	742-5-11-0181-00-08	
X813	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X814	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR 6-POLIG	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X860	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	F
X860	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR 1-POLIG	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X960	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X971	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X972	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C100	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C101	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C105	CC 150PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8509.00	VITRAMON	VJ1206 A 151 F AT	
C112	CC 2,2NF+-10%50VX7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8444.00	VITRAMON	VJ1206 Y 222 K AT	
C114	CE 4,7UF +-10% 25V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7230.00	PANASONIC	ECS-T1ED475KR	
C121	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C126	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C135	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C160	CC 1,5NF+-1% 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0007.7417.00	VITRAMON	VJ1206 A 152 F AT	
C161	CC 1,5NF+-1% 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0007.7417.00	VITRAMON	VJ1206 A 152 F AT	
C164	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C165	CC 270PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8867.00	VITRAMON	VJ1206 A 271 F AT	
C171	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C172	CC 47PF+-1%50V COG 1206 CERAMIC CHIP CAPACITOR	CC 0099.8496.00	VITRAMON	VJ1206 A 470 F AT	
C176	CK 22NF +-1% 63V RM5 KP POLYPROPYLENE CAPACITOR	CK 0007.7675.00	ROEDERSTEI	KP1830-322 06 1 3 W	
C178	CC 82PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8821.00	VITRAMON	VJ1206 A 820 F AT	
C180	CC 1,5NF+-1% 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0007.7417.00	VITRAMON	VJ1206 A 152 F AT	
C181	CC 1,5NF+-1% 50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0007.7417.00	VITRAMON	VJ1206 A 152 F AT	
C200	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C201	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C227	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C230	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C231	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C232	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C233	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C234	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C241	CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8415.00	VITRAMON	VJ1206 A 101 F AT	
C250	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C261	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C265	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C305	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C306	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C307	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C316	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	
C317	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	
C323	CC 22PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8396.00	VITRAMON	VJ1206A 220F FA	
C324	CC 330PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8873.00	VITRAMON	VJ1206 A 331 F AT	
C325	CC 330PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8873.00	VITRAMON	VJ1206 A 331 F AT	
C328	CE 100UF+-20%63V RM5 ELECTROLYTIC CAPACITOR	CE 0008.7879.00	PANASONIC	ECA 1 JFG 101 BQ	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C329	CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8415.00	VITRAMON	VJ1206 A 101 F AT	
C330	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C348	CE 1UF +-10% 25V EIA3528 TANTALUM SMD-CAPACITOR	CE 0007.7217.00	SPRAGUE EL	293D 105 X9 025 B2T	
C352	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C402	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C404	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C411	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C421	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C503	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C505	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C507	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C512	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C514	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C520	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C522	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C531	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C535	CC 33NF+-10% 50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5172.00	VITRAMON	VJ 1206 Y 333 K XAT	
C538	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C621	CC 33NF+-10% 50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5172.00	VITRAMON	VJ 1206 Y 333 K XAT	
C627	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	VALVO	2222 195 65108	
C629	CE 4,7U F+-10% 10V 3528 TANTALUM SMD-CAPACITOR	CE 0007.7275.00	SPRAGUE EL	293D 475 X9 010 B2T	
C631	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C637	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C645	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C646	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C652	CC 33NF+-10% 50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5172.00	VITRAMON	VJ 1206 Y 333 K XAT	
C662	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C667	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C668	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C675	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C681	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C684	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C703	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C705	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C708	CE 10UF +-10% 10V 6032 TANTALUM SMD-CAPACITOR	CE 0007.7281.00	VALVO	2222 195 65109 (229)	
C710	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	VALVO	2222 195 65108	
C715	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C803	CE 47UF +-10% 10V 7343 TANTALUM SMD-CAPACITOR	CE 0007.7300.00	SPRAGUE EL	293D X9 010 D2T	
C851	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C852	CC 33NF+-10%50V5K1200VIEL CERAMIC CAPACITOR	CC 0084.5315.00	UNION CARB	CK05BX333K	
C861	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C862	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C906	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C910	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C913	CE 2,2UF +-10% 10V 3528 TANTALUM SMD-CAPACITOR	CE 0007.7269.00	VALVO	2222 195 68228	
C921	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C925	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C929	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C933	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C937	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C941	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C945	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C950	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C951	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C953	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	VALVO	2222 195 65108	
C970	CE 1UF +-10% 10V 1206 TANTALUM-SMD-CAPACITOR	CE 0007.7252.00	VALVO	2222 195 65108	
D310	BL PC74HC4053T 3X2CH.MUX MULTIPLEXER	BL 0804.0948.00	PHILIPS SE	74HC4053D	
D404	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D405	BL PC74HCT02T 4X2IN NORG QUAD 2INPUT NORGATE	BL 0007.5366.00	PHILIPS SE	74HCT02D	
D503	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D505	BL PC74HCT27T 3X3IN NORG NOR GATE	BL 0007.6227.00	PHILIPS SE	74HCT27D	
D520	BL PC74HCT00T 4X2IN.NAND NAND GATE	BL 0007.6156.00	PHILIPS SE	74HCT00D	
D522	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D538	BL PC74HCT4060T 14B.COUNT BINARY COUNTER W.OSZILL.	BL 0007.6856.00	PHILIPS-CO	PC74HCT4060T	
D603	BL PC74HCT10T 3X3IN NAND NAND GATE	BL 0007.6185.00	PHILIPS SE	74HCT10D	
D668	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D803	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D810	BC PCF8574AT 8BIT-EXPAND IC I2C-BUS I/O-EXPANDER	2031.3862.00	PHILIPS	PCF8574AT	
D820	BC PCF8574T 8B-I/O-PORT IC 8BIT I/O-PORT I2C-BUS	2033.1496.00	PHILIPS	PCF8574T	
D830	BC PCF8574T 8B-I/O-PORT IC 8BIT I/O-PORT I2C-BUS	2033.1496.00	PHILIPS	PCF8574T	
D840	BL PC74HC573T 8XD-LATCH OCTAL D-TYPE LATCH	BL 0007.3586.00	PHILIPS SE	74HC573D	
D850	BL PC74HCT112T 2XJK-FF CL DUAL JK-FF	BL 0007.6327.00	PHILIPS-CO	PC74HCT112T	
D860	BL PC74HCT4060T 14B.COUNT BINARY COUNTER W.OSZILL.	BL 0007.6856.00	PHILIPS-CO	PC74HCT4060T	
D870	BL PC74HCT32T 4X2IN ORG QUAD 2INPUT OR GATE	BL 0007.5389.00	PHILIPS SE	74HCT32D	
D902	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D906	BL PC74HC30T 1X8IN NAND NAND GATE	BL 0804.1144.00	PHILIPS SE	74HC30D	
D911	BL PC74HCT20T 2X4IN.NAND NAND GATE	BL 0007.6210.00	PHILIPS-CO	PC74HCT20T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
D929	BL PC74HC14T 6XINV.SCHM HEXINV.SCHMITT-TRIGGER	BL 0007.4018.00	PHILIPS SE	74HC14D	
D930	BL PC74HCT02T 4X2IN NORG QUAD 2INPUT NORGATE	BL 0007.5366.00	PHILIPS SE	74HCT02D	
D951	BL PC74HCT02T 4X2IN NORG QUAD 2INPUT NORGATE	BL 0007.5366.00	PHILIPS SE	74HCT02D	
D955	BL PC74HCT00T 4X2IN.NAND NAND GATE	BL 0007.6156.00	PHILIPS SE	74HCT00D	
D960	BL PC74HCT02T 4X2IN NORG QUAD 2INPUT NORGATE	BL 0007.5366.00	PHILIPS SE	74HCT02D	
N100	BO TL074AID 4XFET OPAMP QUAD OPAMP	6014.4376.00	TEXAS INST	TL074AI(D)	
N130	BO LM2901D 4X COMPAR COMPARATOR	0007.7875.00	SIGNETICS	LM 2901D	
N200	BO TL074AID 4XFET OPAMP QUAD OPAMP	6014.4376.00	TEXAS INST	TL074AI(D)	
N230	BO SA578D 90DB-KOMPANDER IC COMPANDOR	6044.6090.00	PHILIPS	SA578D	
N240	BO OP27GZ LN OPAMP OPERATIONAL AMPLIFIER	BO 0393.2599.00	ANALOG DEV	OP27GP	
N250	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
N316	BO OP27GZ LN OPAMP OPERATIONAL AMPLIFIER	BO 0393.2599.00	ANALOG DEV	OP27GP	
N322	BO OP27GZ LN OPAMP OPERATIONAL AMPLIFIER	BO 0393.2599.00	ANALOG DEV	OP27GP	
N603	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
N611	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
N621	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
N700	BO TL074AID 4XFET OPAMP QUAD OPAMP	6014.4376.00	TEXAS INST	TL074AI(D)	
N710	BO LM224D 4XLP OPAMP OPERATIONAL AMPLIFIER	0007.7852.00	SIGNETICS	LM224D	
R100	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R101	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R102	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R103	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R104	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R105	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R110	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R111	RG 1,5 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5714.00	DALE	CRCW1206-10 1K5 F-T	
R112 ..114	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R120	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R121	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R122	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R124	RG 392 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6056.00	DALE	CRCW1206-10 392K F-T	
R125	RG 2,21KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5743.00	DALE	CRCW1206-10 2K21 F-T	
R126	RS 0,5W10KOHM+-10%10X10X5 CERMET POTENTIOMETER T	RS 0247.7903.00	BOURNS	3386F-1-103	
R127	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	
R130	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R131	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R132	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R133	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R134	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R135	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R160	RG 432 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6062.00	DALE	CRCW1206-10 432K F-T	
R161	RG 511 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6085.00	DALE	CRCW1206-10 511K F-T	
R163	RG 182 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5989.00	DALE	CRCW1206-10 182K F-T	
R164	RG 182 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5989.00	DALE	CRCW1206-10 182K F-T	
R165	RG 200 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5995.00	DALE	CRCW1206-10 200K F-T	
R166	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R170	RG 274 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.4460.00	DALE	CRCW1206-10 274K F-T	
R171	RG 274 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.4460.00	DALE	CRCW1206-10 274K F-T	
R172	RG 243 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6010.00	DALE	CRCW1206-10 243K F-T	
R173	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R175	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R176	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R177	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	
R178	RG 3,32KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5789.00	DALE	CRCW1206-10 3K32 F-T	
R179	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R181	RG 182 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5989.00	DALE	CRCW1206-10 182K F-T	
R182	RG 1,2MOHM+-5%TK200 1206 CHIP RESISTOR	0007.9949.00	ROEDERSTEI		
R220	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R221	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R222	RG 68,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1902.00	DALE	CRCW1206-10 68K1 F-T	
R223	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R224	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R226	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R227	RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5720.00	DALE	CRCW1206-10 1K82 F-T	
R231	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R233	RG 5,62KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0735.00	DALE	CRCW1206-10 5K62 F-T	
R235	RG 20,0KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5866.00	DALE	CRCW1206-10 20K F-T	
R237	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R240	RG 6,81KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0758.00	DALE	CRCW1206-10 6K81 F-T	
R241	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R242	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R250	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R251	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R252	RG 18,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5850.00	DALE	CRCW1206-10 18K2 F-T	
R254	RS 0,3W 50KOHM+-10%CERMET CERMET POTENTIOMETER	RS 0086.7967.00	BOURNS	3292X-1-50 KOHM+-10%	
R260	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R261	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R263	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R264	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R265	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R303	RS 0,3W 10KOHM+-10%CERMET DEPOS-CARBON POTENTIOMET	RS 0086.7944.00	BOURNS	3292X-1- 10KOHM+-10%	
R304	RS 0,3W 50KOHM+-10%CERMET CERMET POTENTIOMETER	RS 0086.7967.00	BOURNS	3292X-1-50 KOHM+-10%	
R307	RG 10,0 OHM+-1%TK100 1206 CHIP -RESISTOR	RG 0006.8649.00	DALE	CRCW1206-10 10R F-T	
R310	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R311 ..314	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R315	RG 8,25KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0770.00	DALE	CRCW1206-10 8K25 F-T	
R316 ..318	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R320	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R322	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R323	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R324	RG 475 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5695.00	DALE	CRCW1206-10 475R F-T	
R325	RG 475 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5695.00	DALE	CRCW1206-10 475R F-T	
R326	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R327	RG 2,21KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5743.00	DALE	CRCW1206-10 2K21 F-T	
R329	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R330	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R340	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R341	RG 82,5KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1925.00	DALE	CRCW1206-10 82K5 F-T	
R342	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R347	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R348	RG 1,OMOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R350	RG 3,32OHM+-1%TK100 1206 CHIP-RESISTOR	RG 0007.8388.00	PHILIPS	RC 02	
R351	RG 3,32OHM+-1%TK100 1206 CHIP-RESISTOR	RG 0007.8388.00	PHILIPS	RC 02	
R352	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R354	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R355	RG 121,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1960.00	DALE	CRCW1206-10 121K F-T	
R401	RG 2,21KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5743.00	DALE	CRCW1206-10 2K21 F-T	
R402	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R404	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R405	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R410	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R411	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R420	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R421	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R432	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R435	RG 10,OKOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R440	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R441	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R501	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R502	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R503	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R504	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R505	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R507	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R510	RG 18,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5850.00	DALE	CRCW1206-10 18K2 F-T	
R511	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R512	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R513	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R515	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R520	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R522	RG 150 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5972.00	DALE	CRCW1206-10 150K F-T	
R523	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R524	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R530	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R531	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R532	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R533	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R534	RL 0,60W 47,5KOHM+-1%TK50 RESISTOR	RL 0083.1800.00	DRALORIC	SMA/207/47,5K-F-C	
R535	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R538	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R601	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R602	RG 33,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5914.00	DALE	CRCW1206-10 33K2 F-T	
R603	RG 475 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6079.00	DALE	CRCW1206-10 475K F-T	
R604	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R605	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R606	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R607	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R610 ..613	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R620	RG 56,2KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1883.00	DALE	CRCW1206-10 56K2 F-T	
R621	RG 475 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6079.00	DALE	CRCW1206-10 475K F-T	
R623	RG 150 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5972.00	DALE	CRCW1206-10 150K F-T	
R624	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	
R625	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R626	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R627	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R628	RG 43,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5943.00	DALE	CRCW1206-10 43K2 F-T	
R629	RG 13,0KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5837.00	DALE	CRCW1206-10 13K F-T	
R630	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R631	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R632	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R633	RG 475 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6079.00	DALE	CRCW1206-10 475K F-T	
R635	RG 3,01KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5772.00	DALE	CRCW1206-10 3K01 F-T	
R636	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R637	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R641	RG 15,0KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5843.00	DALE	CRCW1206-10 15K F-T	
R642	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R650	RS 0,5W100KOHM+-10%10X10X T CERMET POTENTIOMETER	RS 0087.7583.00	BOURNS	3386F 100KOHM	
R651	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R652	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R662	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R663	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R664	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R665	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R666	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R667	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R668	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R671	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R672	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R673	RG 15,0KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5843.00	DALE	CRCW1206-10 15K F-T	
R674	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R675	RG 56,2KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1883.00	DALE	CRCW1206-10 56K2 F-T	
R676	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R677	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R678	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R680	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R681	RG 150 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5972.00	DALE	CRCW1206-10 150K F-T	
R682	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R683	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R684	RG 150 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5972.00	DALE	CRCW1206-10 150K F-T	
R690	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R691	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R692	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R693	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R694	RG 27,4KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5895.00	DALE	CRCW1206-10 27K4 F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R701	RG 12,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0841.00	DALE	CRCW1206-10 12K1 F-T	
R702	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R703	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R706	RG 12,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0841.00	DALE	CRCW1206-10 12K1 F-T	
R707	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R708	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R709	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R710	RG 121,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1960.00	DALE	CRCW1206-10 121K F-T	
R711	RG 68,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1902.00	DALE	CRCW1206-10 68K1 F-T	
R715	RG 475 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6079.00	DALE	CRCW1206-10 475K F-T	
R716	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R717	RG 18,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5850.00	DALE	CRCW1206-10 18K2 F-T	
R720	RG 15,0KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5843.00	DALE	CRCW1206-10 15K F-T	
R721	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R722	RG 150 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5589.00	DALE	CRCW1206-10 150R F-T	
R725	RS 0,5W5OKOHM+-10%10X10X5 CERMET POTENTIOMETER	RS 0247.7910.00	BOURNS	3386F-1-503	
R726	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R727	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R728	RG 562 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9068.00	DALE	CRCW1206-10 562R F-T	
R801	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R802	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R803	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R804	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R805	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R806	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R807	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R809	RG 3,32KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5789.00	DALE	CRCW1206-10 3K32 F-T	
R810	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R811	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R812	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R815	RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5872.00	DALE	CRCW1206-10 22K1 F-T	
R816	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
..818 R825	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R841	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R842	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R850	RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR	RG 0007.0793.00	DALE	CRCW1206-10 10K F-T	
R851	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R852	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R860	RG 1,0MOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R861	RG 47,5KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5950.00	DALE	CRCW1206-10 47K5 F-T	
R862	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R863	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R901	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R902	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R904	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R905	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R906	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R908	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R909	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R910	RG 1,OMOHM+-1%TK100 1206 CHIP RESISTOR	RG 0815.7532.00	DALE	CRCW1206-10 1M F-T	
R911	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R912	RG 1,O KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R913	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R914	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R922	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R923	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R926	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R927	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R928	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R929	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R932	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R933	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R936	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R937	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R940	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R941	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R944	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R945	RG 221 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.6004.00	DALE	CRCW1206-10 221K F-T	
R950	RG 10,O OHM+-1%TK100 1206 CHIP -RESISTOR	RG 0006.8649.00	DALE	CRCW1206-10 10R F-T	
R951	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R952	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R953	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R954	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R960	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R970	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R971	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R972	RG 100,OKOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
V112	AM SST4393 35V JFET JFET	0828.4737.00	SILICONIX	SST4393	
V130	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V131	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V223	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V224	AD BAV70 70V DUO UDI DUAL DIODE COMMON CATHODE	0007.9278.00	PHILIPS-CO	BAV70	
V250	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V265	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V312	AM BSS123 N-E 100V MOSF FET	0815.7961.00	SIEMENS	BSS 123 E-6327	
V320	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V326	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V327	AE BZV55/C12 0,5W ZDI ZENER DIODE	AE 0006.9897.00	PHILIPS SE	BZV55B12	
V330	AL BD139 N 80V 1AO TRANSISTOR	AL 0274.8994.00	PHILIPS-CO	BD139	
V337	AM BSP108 N-E 80V DMOS MOSFET	6024.3008.00	PHILIPS	BSP108	
V340	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V347	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V352	AK BCX71J P 45V 200MA TRANSISTOR	AK 0007.2096.00	PHILIPS-CO	BCX71J	
V401	AE BZV55/C18 0,5W ZDI ZENER DIODE	AE 0006.9916.00	PHILIPS SE	BZV55B18	
V404	AE BZV55/C5V1 0.5W ZDI ZENER DIODE	AE 0006.9839.00	PHILIPS SE	BZV55B5V1 GEG	
V410	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V411	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V420	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V433	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V435	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V440	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V510	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V523	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V524	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V531	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V532	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V605	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V624	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V633	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V640	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V662	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V664	AE HSMS2800 SCHOTTKY DIODE	AE 0836.8421.00	HEWLETT-PA	HSMS2800	
V674	AE HSMS2800 SCHOTTKY DIODE	AE 0836.8421.00	HEWLETT-PA	HSMS2800	
V675	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
V677	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V703	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
V708	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V710	AD BAV99 70V DUO UDI DIODE	AD 0911.0092.00	PHILIPS-CO	BAV99	
V807	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V815	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V819	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V820	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V821 ..829	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V840	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V841	AD BAV99 70V DUO UDI DIODE	AD 0911.0092.00	PHILIPS-CO	BAV99	
V842	AM BSS123 N-E 100V MOSF FET	0815.7961.00	SIEMENS	BSS 123 E-6327	
V843	AM BSS123 N-E 100V MOSF FET	0815.7961.00	SIEMENS	BSS 123 E-6327	
V852	AM BSS123 N-E 100V MOSF FET	0815.7961.00	SIEMENS	BSS 123 E-6327	
V853	AM BSS100 N-E 100V MOSF MOS-FET	0815.8474.00	SIEMENS	BSS100	
V860	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V902	AK BCX70H N 45V 200MA TRANSISTOR	AK 0007.3105.00	PHILIPS-CO	BCX70H	
V905	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V913	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V923	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V927	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V941	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V960	AD BAW56 70V DUO UDI DIODE	0012.9350.00	PHILIPS-CO	BAW56	
X10	FP STECKERLEISTE 12POL CONNECTOR 12P	FP 0701.5231.00	BERG	75844-102-12	
X13	FP STECKERLEISTE 20P.GER CONNECTOR 20P	FP 0351.3468.00	SIEMENS	V23535-A2200-A202	
X30	FP LEITERPLATTENVERB.26P PRINTEDBOARD	FP 0355.0063.00	ODU	533.065.024.026	6044.6077.00
X31	FP BUCHSENLEISTE 26POL. FEMALE CONNECTOR 26-WAY	FP 0344.4640.00	SIEMENS	V23535-A3280-C261 +	6044.6077.00
X35	DY FLACHBANDKABEL	6044.6077.00			
X35	FP BUCHSENLEISTE 26POL. FEMALE CONNECTOR 26-WAY	FP 0344.4640.00	SIEMENS	V23535-A3280-C261 +	6044.6077.00
X43	FP STECKERLEISTE 10P.GER CONNECTOR 10P	0846.4593.00	SIEMENS	V23535-A2200-A102	
X73	FP STECKERLEISTE 50P.GER CONNECTOR 50P.	FP 0099.9434.00	SIEMENS	V23535-A1200-A502	
X93	FP STECKERLEISTE 16P.GER CONNECTOR	FP 4007.2304.00	SIEMENS	V23535-A2200-A162	
X110	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR 3-POLIG/3 PINS	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X227	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
X240	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
X250	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR 2-POLIG/2 PINS	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X322	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR 3-POLIG/3 PINS	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X323	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR 2-POLIG/2 PINS	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X404	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
X411	1-POLIG/1 PIN FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X532	2-POLIG/2 PINS FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X538	3-POLIG/3 PINS FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X715	1-POLIG/1 PIN FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X812	3-POLIG/3 PINS FP STECKERLEISTE 8P. CONNECTOR 8P	FP 4006.9592.00	BINDER	742-5-11-0181-00-08	
X813	FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X814	6-POLIG/6 PINS FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X841	6-POLIG/6 PINS FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X860	3-POLIG/3 PINS FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X971	1-POLIG/1 PIN FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
X972	3-POLIG/3 PINS FP STIFTLEISTE 36P.R2,54 PIN CONNECTOR	FP 0242.3600.00	BINDER	742-11-0179-00-36	
	3-POLIG/3 PINS				

ROHDE&SCHWARZ

Radio Communications Division

Repair Manual

INTERFACE 1
GI 201S

6044.2042

List of Contents

Note: These sections are contained in the User Manual of the relevant transmitter.

5. Description of Function

List of Figures

Appendix

6. Repair

(See also Circuit Diagram, Parts List and Components Layout in the Appendix to this Repair Manual.)

6.1 Preliminary Remarks

6.1.1 General

The repair of Interface 1 GI 201S starts with the initial check in order to obtain information on the functional order of the unit and its technical data.

The alignment instructions and specifics on the components concerned permit to eliminate all faults.

6.1.2 Restoring the Nominal Characteristics

Any component that is proved to be defective by means of the initial check and other troubleshooting procedures should only be replaced by a component that meets the specifications of the parts list in the Appendix to this Repair Manual.

Only in this way can the technical data be guaranteed that are given in Section 1 of the relevant User Manual.

After replacement of components, it is absolutely necessary to carry out the final test according to 6.6.

6.1.3 Spare Parts

All components are subjected to strict quality control before they are built into the unit.

For components from outside suppliers, e.g. resistors, capacitors and diodes, R&S have laid down their own delivery specifications for the purpose of ensuring maximum reliability.

For this reason we recommend that only original spare parts be used for replacing defective components.

When ordering a spare part, please state the following:

- Type,
- Ordering code of equipment,
- Serial number of equipment,
- Identification number of parts list,
- Designation plus stock number of component.

All of these details are to be found in the circuit diagram, parts list and components layout that accompany the manual.

6.2 Test Equipment and Special Tools

For the repairs described in this manual the test equipment laid down in the test equipment list is required.

Note:

Equivalent test equipment may be used.
Special tools are not required.

6.2.1 List of Test Equipment

Item	Type of equipment, required data	Equipment recommended by R&S	Ordering code
1	Digital Multimeter accuracy: 1 % of measured value	UDL 45	1037.1507.02
2	Power Supply + 12 VDC / 0.1 A + 24 VDC / 1 A	NGMD 35	117.7127.02

6.3.2 Check of Equipment Function

No.	Activity / fault elimination	Nominal value
1.	**AF Line Inputs and Outputs**	
1.1	Configure jumpers as follows: X115.1 ⇒ X115.2 (600 Ω), X110.1 ⇒ X110.3, X110.5 ⇒ X110.7.	
1.2	At X9.2 (AF / TX / A) referred to X9.3 (AF / TX / B) feed in an AF signal (sinusoidal) with the following parameters: f = 1 kHz, P = 0 dBm (0.775 V into 600 Ω).	
1.3	Measure AC voltage between X73.31 (AF-TX-A / C) and X73.32 (AF-TX-B / D) and align with potentiometer R110, if necessary. Possible cause of fault, if alignment is not successful: T110, V115, R110.	60 mV_{rms}
1.4	Configure jumpers as follows: X135.1 ⇒ X135.2 (600 Ω), X130.2 ⇒ X130.3.	
1.5	At X73.19 (AF-TX) referred to ground feed in an AF signal (sinusoidal) with the following parameters: f = 1 kHz, V = 1 V_{rms}.	
1.6	Measure AC voltage between X9.5 (AF / RX / A) and X9.6 (AF / RX / B) across 600 Ω. Possible cause of fault: T130, V135.	360 mV_{rms} ± 40 mV
2.	**Phantom Circuits**	
2.1	Configure jumper as follows: X140.2 ⇒ X140.3.	
2.2	At X9.12 (CARRIER) apply + 12 V via a resistor (1 kΩ).	

No.	Activity / fault elimination	Nominal value
3.4	Measure DC voltage at X9.37 (*BLW). Possible cause of fault: V260	≤ 0.2 V
4.	**Driver Transistors and Gates**	
4.1	At X8.5 apply + 12 V via a resistor (1 kΩ).	
4.2	Measure DC voltage at X8.5. Possible cause of fault: V31	≥ 3.5 V
4.3	Apply high level to X73.45 (*SDAI) via a resistor (4.7 kΩ).	
4.4	Measure DC voltage at X8.5. Possible cause of fault: V31	≤ 1 V
4.5	At X9.13 (VSWR) apply + 12 V via a resistor (1 kΩ).	
4.6	Measure DC voltage at X9.13. Possible cause of fault: V230	≥ 3.5 V
4.7	Apply high level to 73.25 (VSWR-1).	
4.8	Measure DC voltage at X9.13. Possible cause of fault: V230	≤ 1 V
4.9	At X9.18 (*PTT-2) apply + 12 V via a resistor (1 kΩ).	
4.10	Measure DC voltage at X9.18. Possible cause of fault: V280	≥ 3.5 V
4.11	Apply high level to X73.28 (PTT).	
4.12	Measure DC voltage at X9.18. Possible cause of fault: V280	≤ 1 V

No.	Activity / fault elimination	Nominal value
5.	**Line impedance**	
5.1	Measure line impedance between the following contacts:	
	X9.11 ⇒ X73.5 (*OFF-1)	4.75 kΩ
	X9.14 ⇒ X73.6 (NOPTT)	4.75 kΩ
	X9.15 ⇒ X73.23 (UDEF1)	≤ 1 kΩ
	X9.31 ⇒ X73.37 (UDEF2)	≤ 2 Ω
	X9.35 ⇒ X73.3 (*PHIGH)	4.75 kΩ
	X9.36 ⇒ X73.1 (*PLOW)	4.75 kΩ
	X73.20 ⇒ X1.A14 (+ 24 V)	≤ 1 Ω
	Possible cause of fault: respective components in signal path	

6.6 Final Test

Following any repairs Interface 1 GI 201S must be subjected to a final test in order to ensure that its technical data are still guaranteed.

For the final test carry out the entire initial check. If this check is successful the repairs on the interface may be regarded as completed.

If the given nominal values are not reached, send Interface 1 GI 201S for repair.

6.7 Interfaces

A detailed description of the interfaces of Interface 1 GI 201S is found in the Appendix to this manual.

The description of interfaces offers the following information:

- contact assignment of connectors,
- signal designations and
- signal levels.

Details given in the remarks column regarding test points and terminals are provided for use in repairs.

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Radio Communications Division

Appendix

INTERFACE DESCRIPTION
CIRCUIT DIAGRAMS
PARTS LISTS
COMPONENTS LAYOUTS

Connector X1 (INBAND)

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X1.A1	VSWR-2		output	digital	0 to + 5.5 VDC	from X78.A10
X1.A2 to X1.A6	not used					
X1.A7	USER-DEF-2		input	digital	0 to + 5.5 VDC	to X73.37
X1.A8	AF-RX-A inband		input	analog	0 to 2.5 V_{rms}	inband input
X1.A9	MONITOR		output	analog	0 to 1 V_{rms}	
X1.A10	*PTT		output	digital	0 to + 5.5 VDC	from X9.18 open-collector output from X73.28 via LC lowpass filter
X1.A11	not used					
X1.A12	*OFF-INB		input	digital	0 to + 5.5 VDC	to X73.38
X1.A13	not used					
X1.A14	+ 24 VDC1		output	power	0 to + 35 VDC < 0.3 A	from X73.20 via LC filter network
X1.A15	GND					
X1.A16	TEST-REM		input	digital	0 to + 5.5 VDC	to X78.C5
X1.B1	TEMP-2		output	digital	0 to + 5.5 VDC	from X78.B10
X1.B2	*REMOTE-2		output	digital	0 to + 5.5 VDC	from X78.B9
X1.B3	*PTT-INB		input	digital	0 to + 5.5 VDC	to X73.35
X1.B4	SEL-0		output	digital	0 to + 35 VDC	from X73.46
X1.B5	not used					
X1.B6	SCL		output	digital	0 to + 5.5 VDC	from X8.3 via LC lowpass filter
X1.B7	*SDAI		input	digital	0 to + 5.5 VDC	to V31.B via 3.3-kΩ resistor
X1.B8	not used					
X1.B9	*IBIT-A		input	digital	0 to + 5.5 VDC	to X73.27

Connector X1 (continued)

Contact	Signal Name	Signal Description	Direction	Type	Range of Value	Remarks
X1.B10 to X1.B12	not used					
X1.B13	ON-TX		output	digital	0 to + 5.5 VDC	from X73.44
X1.B14	not used					
X1.B15	*REMOTE-1		output	digital	0 V / open	from X11 to X73.22, X78.C2
X1.B16	not used					
X1.C1	USER-DEF-3		output	digital	0 to + 5.5 VDC	from X73.41
X1.C2	CBIT-TX-2		output	digital	0 to + 5.5 VDC	from X78.A9
X1.C3	SDAO		output	digital	0 to + 5.5 VDC	from X8.4 to X73.47
X1.C4	AF-TX-A		output	analog	0 to 600 mV_{rms}	AF output
X1.C5	AF-TX-B		output	analog	0 to 600 mV_{rms}	return line for X1.C4
X1.C6	AF-TX-C		input	analog	0 to 600 mV_{rms}	AF input
X1.C7	AF-TX-D		input	analog	0 to 600 mV_{rms}	return line for X1.C6
X1.C8	not used					
X1.C9	CARRIER-1		output	digital	0 to + 5.5 VDC	from X73.26 to X78.A4
X1.C10	VSWR-1		output	digital	0 to + 5.5 VDC	from X73.25 to X78.A3
X1.C11	TEMP-1		output	digital	0 to + 5.5 VDC	from X73.24 to X78.A2
X1.C12	USER-DEF-1		output	digital	0 to + 5.5 VDC	from X73.23
X1.C13	CARRIER-2		output	digital	0 to + 5.5 VDC	from X78.C1
X1.C14	CBIT-TX-1		output	digital	0 to + 5.5 VDC	from X73.21 to X78.B1
X1.C15 X1.C16	not used					

Connector X8 (REM-BUS)

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X8.1	not used					
X8.2						
X8.3	SCL		input	digital	0 to + 5.5 V	via LC lowpass filter, to X1.B6, X73.48
X8.4	SDAO		input	digital	0 to + 5.5 V	via LC lowpass filter, to X1.C3, X73.47
X8.5	*SDAI (open collector)		output	digital	low: < 1 V < 0.1 A, ≤ + 5.5 V	via LC lowpass filter
X8.6	GND				0 V	
X8.7	+ 24 VDC external supply		output	power	+ 18 to + 31 VDC ≤ 50 mA	via diode and resistor
X8.8	not used					
X8.9	GND				0 V	

Connector X9 (REMOTE)

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X9.1	GND					
X9.2	AF/TX/A	AF input balanced	input	analog	0 to 10 V_{rms}	
X9.3	AF/TX/B	AF input balanced	input	analog	0 to 10 V_{rms}	return line for X9.2
X9.4	GND				0 V	
X9.5	AF/RX/A	AF output balanced	output	analog	0 to 2.5 V_{rms}	
X9.6	AF/RX/B	AF output balanced	output	analog	0 to 2.5 V_{rms}	return line for X9.5
X9.7	GND				0 V	
X9.8	TEST-TX (open collector)		output	digital	low: < 1 V, < 30 mA 0 to + 35 A	via LC lowpass filter

Connector X9 (continued)

Contact	Signal Name	Signal Description	Direction	Type	Range of Value	Remarks
X9.9	TEST-TTL	sum test	output	digital	0 to 5.5 V	via RC lowpass filter
X9.10	TEST-RM	(open collector)	output	digital	low: < 1 V, < 30 mA 0 to + 35 V	via LC lowpass filter
X9.11	*OFF-1		input	digital	0 to 5.5 V	via RC lowpass filter, to X73.5
X9.12	CARRIER	(open collector)	output	digital	low: < 1 V, < 30 mA 0 to + 35 V	via LC lowpass filter
X9.13	VSWR	(open collector)	output	digital	low: < 1 V, < 30 mA 0 to + 35 V	via LC lowpass filter
X9.14	NOPTT		input	digital	0 to 5.5 V	via RC lowpass filter, to X73.6
X9.15	U-DEF1		input	digital	0 to 5.5 V	via RC lowpass filter
X9.16	-PTT		input	low	see X120	via RC lowpass filter
X9.17	+ PTT		input	high	see X120	via RC lowpass filter
X9.18	*PTT-2	(open collector)	bidirec.	digital	low: < 1 V, < 30 mA 0 to + 35 V	via LC lowpass filter
X9.19	VOPSW		output	power	0 to 35 V < 1 A	via LC lowpass filter, from X73.4
X9.20	GND				0 V	
X9.21	not used					
X9.22	not used					
X9.23	not used					
X9.24	not used					

Connector X9 (continued)

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X9.25	CLIMAX (ground/ open)		output	digital	0 to 35 V < 100 mA	depending on jumper on X150
X9.26	not used					
X9.27	not used					
X9.28	GND				0 V	
X9.29	not used					
X9.30	not used					
X9.31	U-DEF2		output	digital	low: < 1 V, < 30mA 0 to + 35 V	via LC lowpass filter
X9.32	AF-RELAY (high level input)		input	analog	< 3 V_{rms}	via LC lowpass filter
X9.33	not used					
X9.34	not used					
X9.35	*PHIGH		input	digital	0 to + 5.5 V	via RC lowpass filter, to X73.3
X9.36	*PLOW		input	digital	0 to + 5.5 V	via RC lowpass filter, to X73.1
X9.37	*BLW (open-drain)		output	digital	low: < 0.2 V, < 1 A 0 to + 35 V	via LC lowpass filter

Connectors X10, X11, X12

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X10	*OFF / ON		input	digital	0 V / open	connection for S1
X11	*REMOTE-1 remote control		input	digital	0 V / open	connection for S1
X12	GND				0 V	connection for S1

Connector X73 (MODULATOR)

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X73.1	*PLOW		output	digital	0 to + 5.5 V	from X9.36, via RC lowpass filter
X73.2	BLW-1	blower on	input	digital	0 to + 10 V	FET gate
X73.3	*PHIGH		output	digital	0 to + 5.5 V	from X9.35, via RC lowpass filter
X73.4	VOP-SW		input	power	0 to + 35 V < 1 A	to X9.19, via LC lowpass filter
X73.5	*OFF-1		output	digital	0 to + 5.5 V	from X9.11, via RC lowpass filter
X73.6	NOPTT		output	digital	0 to + 5.5 V	from X9.14
X73.7	*VSWR-AMP		output	digital	0 to + 5.5 V	from X78.C7
X73.8	*PTT-INT	optocoupler output	output	digital	0 to 20 mA < + 10 V	
X73.9	*OFF-TX-1		input	digital	0 to + 35 V	to X78.C9
X73.10	*OFF-TX-2		output	digital	0 to + 5.5 V	from X78.C8
X73.11	AGC-		output	analog	0 to + 5 V < 1 mA	from X78.C11
X73.12	AGC +		output	analog	0 to + 5 V < 1 mA	from X78.C10
X73.13	AGC-EXT		output	digital	0 to + 5.5 V	from X78.C12
X73.14	AMP-RED		output	analog	-10 to + 10 V < 2mA	from X78.B11
X73.15	ENABLE		output	digital	0 to + 5.5 V	from X78.C13
X73.16	PTT-AMP		input	digital	0 to + 5.5 V	to X78.B12
X73.17	*CAR-AMP		output	digital	0 to + 5.5 V	from X78.C14
X73.18	TEST-AMP		output	digital	0 to + 5.5 V	to X78.B13
X73.19	AF-TX	monitoring	input	analog	0 to 4 V_{rms}	
X73.20	+ 24 V		input	power	0 to + 35 V < 0.3 A	to X1.A14

Connector X73 (continued)

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X73.21	CBIT-TX-1		input	digital	0 to + 5.5 V	to X1.C14, X78. B1, 4.75-kΩ load
X73.22	*REMOTE-1		output	digital	0 to + 5.5 V	from X11 to X1.B15, X78.C2
X73.23	USER-DEF-1		input	digital	0 to + 5.5 V	to X1.C12
X73.24	TEMP-1		input	digital	0 to + 5.5 V	to X1.C11, X78.A2
X73.25	VSWR-1		input	digital	0 to + 5.5 V	to X1.C10, X78.A3, 4.75-kΩ load
X73.26	CARRIER-1		input	digital	0 to + 5.5 V	to X1.C9, X78.A4, 4.75-kΩ load
X73.27	*IBIT-A		output	digital	0 to + 5.5 V	from X1.B9
X73.28	PTT		input	digital	0 to + 5.5 V	to X1.A10
X73.29	GND				0 V	
X73.30	GND				0 V	
X73.31	AF-TX-A/C	AF output	output	analog	0 to 600 mV_{rms}	
X73.32	AF-TX-B/D		output	analog		return line for X73.31
X73.33	GND					
X73.34	GND					
X73.35	*PTT-INB		output	digital	0 to + 5.5 V	from X1.B3
X73.36	not used					
X73.37	USER-DEF-2		output	digital	0 to + 5.5 V	from X1.A7
X73.38	*OFF-INB		output	digital	0 to + 5.5 V	from X1.A12
X73.39	not used					
X73.40	*OFF / ON		output	digital	0 V / open	from X10

Connector X73 (continued)

Contact	Signal Name	Signal Description	Direction	Type	Range of Value	Remarks
X73.41	USER-DEF-3		input	digital	0 to + 5.5 V	to X1.C1
X73.42	not used					
X73.43	not used					
X73.44	ON-TX		input	digital	0 to + 5.5 V	to X1.B13
X73.45	*SDAI		input	digital	0 to + 5 mA	to V31.B, connected to BE diode
X73.46	SEL-0		input	digital	0 to + 35 V	to X1.B4
X73.47	SDAO		output	digital	0 to + 5.5 V	from X8.4 to X1.C3, via LC lowpass filter
X73.48	SCL		output	digital	0 to + 5.5 V	from X8.3 to X1.B6, via LC lowpass filter
X73.49	GND				0 V	
X73.50	GND				0 V	

Connector X78 (INTERFACE 2)

Contact	Signal Name	Description	Direction	Type	Range of Value	Remarks
X78.A1	not used					
X78.A2	TEMP-1		output	digital	0 to + 5.5 V	from X73.24 to X1.C11
X78.A3	VSWR-1		output	digital	0 to + 5.5 V	from X73.25 to X1.C10, 4.75-kΩ load
X78.A4	CARRIER-1		output	digital	0 to + 5.5 V	from X73.26 to X1.C9, 4.75-kΩ load
X78.A5	not used					
X78.A6	not used					
X78.A7	not used					
X78.A8	not used					
X78.A9	CBIT-TX-2		input	digital	0 to + 5.5 V	to X1.C2
X78.A10	VSWR-2		input	digital	0 to + 5.5 V	to X1.A1
X78.A11	not used					
X78.A12	not used					
X78.A13	not used					
X78.A14	not used					
X78.A15	not used					
X78.A16	GND				0 V	
X78.B1	CBIT-TX-1		output	digital	0 to + 5.5 V	from X73.21 to X1.C14, 4.75-kΩ load
X78.B2	not used					
X78.B3	not used					
X78.B4	not used					
X78.B5	not used					
X78.B6	not used					

Connector X78 (continued)

Contact	Signal Name / Description	Direction	Type	Range of Value	Remarks
X78.B7	not used				
X78.B8	not used				
X78.B9	*REMOTE-2	input	digital	0 to + 5.5 V	to X1.B2
X78.B10	TEMP-2	input	digital	0 to + 5.5 V	to X1.B1
X78.B11	AMP-RED	input	analog	-10 to + 10 V, < 2 mA	to X73.14
X78.B12	PTT-AMP	output	digital	0 to + 5.5 V	from X73.16
X78.B13	TEST-AMP	input	digital	0 to + 5.5 V	to X73.18
X78.B14	not used				
X78.B15	not used				
X78.B16	GND			0 V	
X78.C1	CARRIER-2	input	digital	0 to + 5.5 V	to X1.C13
X78.C2	*REMOTE-1	output	digital	0 V / open	from X11 to X1.B15, X73.22
X78.C3	not used				
X78.C4	not used				
X78.C5	TEST-REM	output	digital	0 to + 5.5 V	from X1.A16
X78.C6	not used				
X78.C7	*VSWR-AMP	input	digital	0 to + 5.5 V	to X73.7
X78.C8	*OFF-TX-2	input	digital	0 to + 5.5 V	to X73.10
X78.C9	*OFF-TX-1	output	digital	0 to + 35 V	from X73.9
X78.C10	AGC +	input	analog	0 to + 5 V < 1 mA	to X73.12
X78.C11	AGC-	input	analog	0 to + 5 V < 1 mA	to X73.11
X78.C12	AGC-EXT	input	digital	0 to + 5.5 V	to X73.13
X78.C13	ENABLE	input	digital	0 to + 5.5 V	to X73.15
X78.C14	*CAR-AMP	input	digital	0 to + 5.5 V	to X73.17
X78.C15	not used				
X78.C16	GND			0 V	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
C1	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C2	CE 100UF+-20%63V RM5 ELECTROLYTIC CAPACITOR	CE 0008.7879.00	PANASONIC	ECA 1 JFG 101 BQ	
C4	CE 100UF+-20%63V RM5 ELECTROLYTIC CAPACITOR	CE 0008.7879.00	PANASONIC	ECA 1 JFG 101 BQ	
C5	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C10	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C11	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C20	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C21	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C30	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C31	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C32	CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR	CC 0007.7398.00	VITRAMON	VJ 1206 A 102 F XAT	
C33	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C51	CE 10UF+-20%50V RM2,5 ELECTROLYTIC CAPACITOR	CE 0008.7427.00	PHILIPS CO	2222 116 11109	
C52	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C54	CE 10UF+-20%50V RM2,5 ELECTROLYTIC CAPACITOR	CE 0008.7427.00	PHILIPS CO	2222 116 11109	
C55	CC 150PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR	CC 0099.8509.00	VITRAMON	VJ1206 A 151 F AT	
C56	CE 47UF+-20%50V RM2,5 ELECTROLYTIC CAPACITOR	CE 0008.7479.00	PANASONIC	ECA1 HFG 470 I	
C100	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C110	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C118	CC 1NF +-10%500VHDK 1206 CERAMIC CHIP CAPACITOR	0007.8807.00	VITRAMON	VJ1206 Y102K XET	
C119	CC 1NF +-10%500VHDK 1206 CERAMIC CHIP CAPACITOR	0007.8807.00	VITRAMON	VJ1206 Y102K XET	
C123	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C124	CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8521.00	VITRAMON	VJ 1206 Y 103 K XAT	
C126	CC 10NF +-10%500VHDK 1206 CERAMIC CHIP CAPACITOR	0007.8865.00	VITRAMON	VJ1206 Y103K XET	
C128	CC 10NF +-10%500VHDK 1206 CERAMIC CHIP CAPACITOR	0007.8865.00	VITRAMON	VJ1206 Y103K XET	
C129	CC 10NF +-10%500VHDK 1206 CERAMIC CHIP CAPACITOR	0007.8865.00	VITRAMON	VJ1206 Y103K XET	
C130	CC 15NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0099.8921.00	VITRAMON	VJ 1206 Y 153 K XAT	
C138	CC 1NF +-10%500VHDK 1206 CERAMIC CHIP CAPACITOR	0007.8807.00	VITRAMON	VJ1206 Y102K XET	
C139	CC 1NF +-10%500VHDK 1206 CERAMIC CHIP CAPACITOR	0007.8807.00	VITRAMON	VJ1206 Y102K XET	
C200	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C220	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C230	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C240	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C241	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C250	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C260	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C280	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C290	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	
C293	CC 100NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR	CC 0007.5237.00	VITRAMON	VJ 1206 Y 104 K XAT	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
D200	BL PC74HCT08T 4X2IN ANDG AND GATE	BL 0007.6179.00	PHILIPS SE	74HCT08D	
L3	LD 30UH 0,4A 2,7OHM CHOKE	LD 0026.4561.00	FASTRON GE	MISC-300M-00	
L30	LD 1UH 10% 0,38A 1210 SMD-INDUCTOR	LD 6006.0130.00	SIEMENS	B82422-A1102-K100	
L31	LD 1UH 10% 0,38A 1210 SMD-INDUCTOR	LD 6006.0130.00	SIEMENS	B82422-A1102-K100	
L32	LD 1UH 10% 0,38A 1210 SMD-INDUCTOR	LD 6006.0130.00	SIEMENS	B82422-A1102-K100	
L33	LD 470 UH 10% 180 MIA CHOKE	0458.0036.00	DELEVAN	1641	
L100	LD 10UH 10% 0,18A 1210 SMD-INDUCTOR	LD 0007.9255.00	SIEMENS	B82422-A1103-K100	
L118	LD 100 UH10%8,000HMO,084A CHOKE	LD 0067.3101.00	DELEVAN	1025-68	
L119	LD 100 UH10%8,000HMO,084A CHOKE	LD 0067.3101.00	DELEVAN	1025-68	
L138	LD 100 UH10%8,000HMO,084A CHOKE	LD 0067.3101.00	DELEVAN	1025-68	
L139	LD 100 UH10%8,000HMO,084A CHOKE	LD 0067.3101.00	DELEVAN	1025-68	
L200	LD 10UH 10% 0,18A 1210 SMD-INDUCTOR	LD 0007.9255.00	SIEMENS	B82422-A1103-K100	
L220	LD 10UH 1,5A 0,23OHM CHOKE	LD 0026.4626.00	PHILIPS CO	4312 020 16340	
L230	LD 10UH 10% 0,18A 1210 SMD-INDUCTOR	LD 0007.9255.00	SIEMENS	B82422-A1103-K100	
L240	LD 10UH 10% 0,18A 1210 SMD-INDUCTOR	LD 0007.9255.00	SIEMENS	B82422-A1103-K100	
L250	LD 10UH 10% 0,18A 1210 SMD-INDUCTOR	LD 0007.9255.00	SIEMENS	B82422-A1103-K100	
L260	LD 10UH 1,5A 0,23OHM CHOKE	LD 0026.4626.00	PHILIPS CO	4312 020 16340	
L280	LD 10UH 10% 0,18A 1210 SMD-INDUCTOR	LD 0007.9255.00	SIEMENS	B82422-A1103-K100	
L290	LD 10UH 10% 0,18A 1210 SMD-INDUCTOR	LD 0007.9255.00	SIEMENS	B82422-A1103-K100	
N55	BO SE5534AFE LN OPAMP OPERATIONAL AMPLIFIER	BO 0301.3335.00	SIGNETICS	SE5534AFE	
R10	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R11	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R20	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R21	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R33	RL 0,60W27,40 OHM+-1%TK50 RESISTOR NICHT BESTUECKT/NOT FITTED	RL 0082.9271.00	DRALORIC	SMA0207/27,40HM-F-D	
R50	RG 3,32KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5789.00	DALE	CRCW1206-10 3K32 F-T	
R52	RG 68,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1902.00	DALE	CRCW1206-10 68K1 F-T	
R53	RG 68,1KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.1902.00	DALE	CRCW1206-10 68K1 F-T	
R54	RS 0,5W100KOHM+-10%10X10X CERMET POTENTIOMETER T	RS 0087.7583.00	BOURNS	3386F 100KOHM	
R55	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R56	RG 22,1 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5489.00	DALE	CRW1206-10 22R1 F-T	
R57	RG 562 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9068.00	DALE	CRCW1206-10 562R F-T	
R100	RG 18,2KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5850.00	DALE	CRCW1206-10 18K2 F-T	
R101	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R102	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
R110	RS 0,75W 1KOHM+-10%CERMET DEPOS.-CARBON POTENTIOMET	RS 0037.7367.00	BOURNS	3006 P-XXXXX	
R111	RG 1,5 KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5714.00	DALE	CRCW1206-10 1K5 F-T	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
R112	RG 301 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5643.00	DALE	CRCW1206-10 301R F-T	
R113	RG 301 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5643.00	DALE	CRCW1206-10 301R F-T	
R115	RG 1,21KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9968.00	DALE	CRCW1206-10 1K21 F-T	
R122	RL 0,60W 1KOHM+-1%TK50 RESISTOR	RL 0082.2160.00	DRALORIC	SMA0207/1K-F-C	
R124	RL 0,60W 1KOHM+-1%TK50 RESISTOR	RL 0082.2160.00	DRALORIC	SMA0207/1K-F-C	
R126	RL 0,60W 1KOHM+-1%TK50 RESISTOR	RL 0082.2160.00	DRALORIC	SMA0207/1K-F-C	
R128	RL 0,60W 1KOHM+-1%TK50 RESISTOR	RL 0082.2160.00	DRALORIC	SMA0207/1K-F-C	
R129	RL 0,60W 1KOHM+-1%TK50 RESISTOR	RL 0082.2160.00	DRALORIC	SMA0207/1K-F-C	
R130	RG 619 KOHM+-1%TK100 1206 RESISTOR CHIP NICHT BESTUECKT/NOT FITTED TRIMMWERT SELECTED	RG 0007.6104.00	DALE	CRCW1206 619KOHM F T	
R132	RG 301 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5643.00	DALE	CRCW1206-10 301R F-T	
R133	RG 301 OHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5643.00	DALE	CRCW1206-10 301R F-T	
R135	RG 1,21KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.9968.00	DALE	CRCW1206-10 1K21 F-T	
R200	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R210	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R230	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R240	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R241	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R242	RG 100 OHM+-1%TK100 1206 CHIP RESISTOR	RG 0006.8884.00	DALE	CRCW1206-10 100R F-T	
R250	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R251	RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5720.00	DALE	CRCW1206-10 1K82 F-T	
R270	RG 6,81KOHM+-1%TK100 1206 CHIP RESISTOR	RG 0007.0758.00	DALE	CRCW1206-10 6K81 F-T	
R271	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R272	RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR	RG 0007.1948.00	DALE	CRCW1206-10 100K F-T	
R280	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R281	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R291	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R292	RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP	RG 0007.5820.00	DALE	CRCW1206-10 4K75 F-T	
R293	RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR	RG 0006.7271.00	DALE	CRCW1206-10 1K F-T	
T110	LU NF 0,2-20KHZ/2DB E14 AUDIO TRANSFORMER	6024.3966.00	HAUFE	R&S-ZCHNG.6024.3966	
T130	LU NF 0,2-20KHZ/2DB TRANSFORMER	0586.7932.00	HAUFE	R&S-ZCHNG.586.7932	
U120	BP H11A550 OPTOCOUPLER OPTO COUPLER	BP 0006.0948.00	GEN-ELECTR	H11A550	
V31	AK BC850B N 45V 200MA TRANSISTOR	AK 0007.7969.00	PHILIPS-CO	BC850B	
V33	AD BAV10 60V UDI DIODE	AD 0012.9437.00	PHILIPS-CO	BAV10	
V50	AE BZV55/C12 0,5W ZDI ZENER DIODE	AE 0006.9897.00	PHILIPS SE	BZV55B12	
V51	AK BSP41 N 60V 1A TRAN TRANSISTOR	6036.1757.00	PHILIPS	BSP41	
V115	AE BZW04/24B 24V BISUPPR BISUPPRESSOR	0586.9606.00	SGS-THOMSO	BZW04P26B(RL)	

Kennz. Comp. No.	Benennung Designation	Sachnummer Stock No.	Hersteller Manufacturer	Bezeichnung Designation	enthalten in contained in
V120	AD BAS32 75V UDI DIODE	AD 0006.7288.00	PHILIPS-CO	BAS32	
V123	AE BZX55/B10 0,5W ZDI ZENER DIODE	AE 0289.4302.00	PHILIPS-CO	BZX55/B10	
V135	AE BZW04/24B 24V BISUPPR BISUPPRESSOR	0586.9606.00	SGS-THOMSO	BZW04P26B(RL)	
V200	AK BC850B N 45V 200MA TRANSISTOR	AK 0007.7969.00	PHILIPS-CO	BC850B	
V220	AG 1N5804 GL 100V 2A5 RECTIFIER	AG 0453.4762.00	UNITRODE C	1N8504	
V230	AK BC850B N 45V 200MA TRANSISTOR	AK 0007.7969.00	PHILIPS-CO	BC850B	
V240	AK BC850B N 45V 200MA TRANSISTOR	AK 0007.7969.00	PHILIPS-CO	BC850B	
V250	AK BC850B N 45V 200MA TRANSISTOR	AK 0007.7969.00	PHILIPS-CO	BC850B	
V260	AM BUZ101 N-E 50V MOSF MOS-FET	0048.3751.00	SIEMENS	BUZ101 (C67078-S1350	
V261	AE BZX79B39 2% 0.5W ZDI ZENER	AE 0008.7662.00	PHILIPS	BZX79B39	
V270	AE BZV55/C5V1 0.5W ZDI ZENER DIODE	AE 0006.9839.00	PHILIPS SE	BZV55B5V1 GEG	
V280	AK BC850B N 45V 200MA TRANSISTOR	AK 0007.7969.00	PHILIPS-CO	BC850B	
V291	AK BC850B N 45V 200MA TRANSISTOR	AK 0007.7969.00	PHILIPS-CO	BC850B	
V293	AD BAV99 70V DUO UDI DIODE	AD 0911.0092.00	PHILIPS-CO	BAV99	
X1	FP BUCHSENLEISTE 48P.KURZ 48-SOCKET INSERT	FP 0099.0943.00	PANDUIT	100-348-433/999	
X8	FM BUCHSENLEISTE 9P.WINK FEMALE CONNECTOR	FM 0243.1346.00	SOURIAU	DE-9S-1A0N	
X9	FM BUCHSENLEISTE 37P.WINK 37-SOCKET INSERT	FM 0273.4043.00	SOURIAU	DC-37S-500C(531C)	
X10	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
X11	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
X12	VL STECKLOETOESE 7,5X1,1 PLUG-IN SOLDERING LUG	VL 0078.2747.00	-	R&S-ZCHNG.078.2747	
X73	DY FLACHBANDLEITUNG X73	6044.2071.00			
X78	FP STECKERLEISTE 48P.KURZ CONNECTOR 48P	FP 1040.7483.00	PANDUIT	100-348-133	
X100	FP STIFTLEISTE 3P.R2,54 PIN CONNECTOR 3-POLIG	FP 0009.6101.00			
X110	FP STECKERLEISTE 8P. CONNECTOR 8P	FP 4006.9592.00	BINDER	742-5-11-0181-00-08	
X115	FP STIFTLEISTE 3P.R2,54 PIN CONNECTOR 3-POLIG	FP 0009.6101.00			
X120	FP STECKERLEISTE 12POL CONNECTOR 12P	FP 0701.5231.00	BERG	75844-102-12	
X130	FP STIFTLEISTE 3P.R2,54 PIN CONNECTOR 3-POLIG	FP 0009.6101.00			
X135	FP STIFTLEISTE 3P.R2,54 PIN CONNECTOR 3-POLIG	FP 0009.6101.00			
X140	FP STIFTLEISTE 3P.R2,54 PIN CONNECTOR 3-POLIG	FP 0009.6101.00			
X150	FP STIFTLEISTE 3P.R2,54 PIN CONNECTOR 3-POLIG	FP 0009.6101.00			