

T859 Parts List (IPN 220-01159-01)

How To Use This Parts List

The components listed in this parts list are divided into two main types: those with a circuit reference (e.g. C2, D1, R121, etc.) and those without (miscellaneous and mechanical).

Those with a circuit reference are grouped in alphabetical order and then in numerical order within each group. Each component entry comprises three or four columns: the circuit reference, variant (if applicable), IPN and description. A number in the variant column indicates that this is a variant component which is fitted only to the product type listed. Static sensitive devices are indicated by an (S) at the start of the description column.

The miscellaneous and mechanical section lists the variant and common parts in IPN order. Where possible, a number in the legend column indicates their position in the mechanical assembly drawing.

The Parts List Amendments box below lists component changes that took place after the parts list and diagrams in this section were compiled. These changes (e.g. value changes, added/deleted components, etc.) are listed by circuit reference in alphanumeric order and supersede the information given in the parts list or diagrams. Components without circuit references are listed in IPN order.

Parts List Amendments

C2, C3	Changed from 27pF (IPN 015-02270-02) to 22pF (IPN 015-02220-06) to improve input matching and thus input sensitivity (710942).
C6	(Hi Band) 100n mylar capacitor and 10e resistor added in series across C6 to improve low power stability and eliminate 3MHz instabilities (710294).
C11 & C12	(Hi Band) 10p added across base & emitters of Q3. To ensure adequate drive power on hi band versions (90/08-390). (Hi Band) deleted to improve low power stability and eliminate 3MHz instabilities (710294).
C22	(Low Band) changed from 100p (015-03100-02) to 33p. To eliminate instability & improve power out (90/01-023). (Mid & Hi Bands) changed from 100p (015-03100-02) to 22p. To eliminate instability & improve power out (90/01-023).
C23	(Low Band) changed from 47p (029-02470-02) to 27p. To eliminate instability & improve power out (90/01-023). (Hi Band) changed from 47p (029-02470-02) to 39p. To accommodate power variations across the band (89/10-547) (Mid & Hi Bands) changed from 39p (029-02390-02) to 18p. To eliminate instability & improve power out (90/01-023).
C24	(Low Band) changed from 39p (029-02390-02) to 22p. To eliminate instability & improve power out (90/01-023). (Mid Band) changed from 39p (029-02390-02) to 18p. To eliminate instability & improve power out (90/01-023). (Hi Band) changed from 33p (029-02330-02) to 18p. To eliminate instability & improve power out (90/01-023).
C27,C43 & C47	(Hi Band) changed from 33p (029-02330-02) to 27p. To accommodate power variations across the band (89/10-547)
C28 & C49	(Mid & Hi Bands) changed from 33p (029-02330-02) to 27p. To eliminate instability & improve power out (90/01-023).
C27, C28, C42 C43, C47 & C49	Changed from mica case type to ceramic chip type. All values remain the same. To eliminate 3MHz & 90MHz instabilities (95/08-7040 & 96/07-7106)).
C42, C43, C47 & C49	(All Bands) changed from ceramic chip to cased mica. All values remain the same. To improve power output and reduce excessive heating around the collectors of the final transistors (710656, 711052).
C69	10u added. To eliminate instability & improve power out (90/01-023).
C70A	100n added. To eliminate instability & improve power out (90/01-023).
C80 & C86	150p deleted. To prevent 800kHz instability (93/03-155).
C102	150p deleted. To prevent 800kHz instability of Q15 & Q16 (95/08-7040 & 96/08-7113).
C130 & C131	150p added. To eliminate instability & improve power out (90/01-023).

Parts List Amendments

D3	Changed from MR750/SR2607 (IPN 001-00011-60) to MR2520L (IPN 001-00012-90) to provide overvoltage transient suppression (750087/88/89/90/91/92).
IC4	LM317L added. To eliminate instability & improve power out (90/01-023).
L18, L35 & L38	Changed from coil 1.5T/8.0mm (052-08180-15) to Inductor Hairpin 10mm Tall (89/10-566).
L21	Changed from coil 1.5T/6.0mm (052-08160-15) to 2.5T/6.0mm (90/01-023).
L27 & L31	Changed from coil 1.5T/6.0mm (052-08160-15) to 2.5T/6.0mm (89/10-566).
R7	(Hi Band) changed from 33e (030-02330-20) to 68e. To ensure adequate drive power on hi band versions (90/08-390).
R11	(Hi Band) changed from 10e (032-32100-00) to 22e. To improve power output from driver stages (90/06-240).
R34 & R35	(Low & Mid Bands) 180e added across base & emitter of Q6. To eliminate instability & improve power out (90/01-023).
R37	1k added. To eliminate instability & improve power out (90/01-023).
R69	10e added. To eliminate instability & improve power out (90/01-023).
R70	220e added. To eliminate instability & improve power out (90/01-023).
R81	1k deleted. To ensure forward power alarm operates under all expected conditions (97/01-0012).
R82 & R84	Changed from 4k7 (036-14470-00) to 2k2. To ensure proper operation of alarm circuits (92/07-501).
R96	Changed from 10k (036-15100-00) to 4k7. To raise limits of reverse power alarm switching point (3/10/89).
R98	Changed from 1k (036-14100-00) to 3k9. To provide adequate setting margin for forward power alarm (89/11-581).
349-00020-36	The two M3x8 Torx screws which secure the module into the rack frame have been replaced by M3x8 Pozidriv screws (IPN 349-00020-55) (750101/2/3/5/6).
356-00010-03	Solder tag fitted under R92 mounting screw and soldered to the PCB earth plane near R1/R2 junction to improve power alarm operation (710384).

Ref	Var	IPN	Description	Ref	Var	IPN	Description
<div style="border: 1px solid black; padding: 5px;"> <p>Note</p> <p>LOW = 400-440MHZ MID = 440-480MHZ HI = 480-520MHZ</p> </div>				C67		015-21220-01	CAP CER 0805 CHIP 2P2 +/-0.25P NPO 50V
				C68		015-21220-01	CAP CER 0805 CHIP 2P2 +/-0.25P NPO 50V
				C69		025-08100-02	CAP TANT BEAD 10M 10% 16V
				*C70	LOW	015-21470-01	CAP CER 0805 CHIP 4P7 +/-0.25P NPO 50V
				*C70	MID	015-21390-01	CAP CER 0805 CHIP 3P9 +/-0.25P NPO 50V
				*C70	HI	015-21390-01	CAP CER 0805 CHIP 3P9 +/-0.25P NPO 50V
				C70A		015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
				C72		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
				C73		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C76		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
				C77		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C78		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C81		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C84		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
				C85		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C87		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C90		015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
				C91		025-08100-02	CAP TANT BEAD 10M 10% 16V
				C92		015-25100-08	CAP CER 0805 CHIP 10N 10% X7R 50V
				C93		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C96		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C97		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C98		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
				C99		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C100		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C101		015-25100-08	CAP CER 0805 CHIP 10N 10% X7R 50V
				C102		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C103		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C104		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
				C105		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C106		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C108		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C109		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C110		015-01680-02	CAP CER HIQ 1210 CHIP 6P8 5% NPO 200V
				C111		015-01560-02	CAP CER HIQ 1210 CHIP 5P6 5% NPO 200V
				C112		015-01820-06	CAP CER 1210 CHIP 8P2 NPO 500V GRM42-2
				C113		015-01820-06	CAP CER 1210 CHIP 8P2 NPO 500V GRM42-2
				C114		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C115		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C116		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C117		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C118		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C119		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C120		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C121		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C122		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C123		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C124		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C125		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C126		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C127		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C128		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C129		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C130		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				C131		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
				D1		001-00013-45	(S) DIODE SCHOTTKY 1SS97/2
				D2		001-00013-45	(S) DIODE SCHOTTKY 1SS97/2
				D3		001-00011-60	(S) DIODE SR2607 6A/30V
				D5		008-00013-32	(S) LED 3MM RED LO CURRENT NO MTG
				D6		001-10000-70	(S) DIODE SMD BAV70 DUAL SW SOT-23 COM CA
				D10		008-00013-35	(S) LED 3MM GREEN LO CURRENT NO MTG
				D11		008-00013-32	(S) LED 3MM RED LO CURRENT NO MTG
				D13		001-10000-70	(S) DIODE SMD BAV70 DUAL SWSOT-23 COM CA
				D17		001-10000-70	(S) DIODE SMD BAV70 DUAL SW SOT-23 COM CA
				IC1		002-10003-24	(S) IC SMD 324 QUAD OP AMP SO14
				IC2		002-00014-62	(S) IC 317L 100MA REG 3 TERMINAL TO-92
				IC3		002-10003-24	(S) IC SMD 324 QUAD OP AMP SO14
				IC4		002-00014-62	(S) IC 317L 100MA REG 3 TERMINAL TO-92
				L1		052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM WIRE
				L2		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
				L3		065-00010-04	BEAD FERRITE F8 4X2X5MM
				L5		065-00010-04	BEAD FERRITE F8 4X2X5MM
				L6		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
				L7		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
				L8		065-00010-04	BEAD FERRITE F8 4X2X5MM
				L11		065-00010-04	BEAD FERRITE F8 4X2X5MM
				L12		065-00010-04	BEAD FERRITE F8 4X2X5MM
				L13		052-08160-15	COIL A/W 1.5T/6.0MM HOR 0.8MM WIRE
				L14		051-00005-45	COIL IND 18MM FORMED COPPER STRIP
				L15		051-00005-45	COIL IND 18MM FORMED COPPER STRIP
				L16		065-00010-04	BEAD FERRITE F8 4X2X5MM
				L17		065-00010-04	BEAD FERRITE F8 4X2X5MM
				L18		051-00005-60	IND HAIRPIN 10MM TALL T859
				L19		051-00005-39	COUPLER WIRELINE TAIT COIL DWG NO 539
				L20		052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM WIRE
				L21		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
				L22		065-00010-04	BEAD FERRITE F8 4X2X5MM
				L23		051-00005-45	COIL IND 18MM FORMED COPPER STRIP
				L24		052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM WIRE
				L25		052-08130-15	COIL A/W 1.5T/3.0MM HOR 0.8MM WIRE
				L26		052-08130-15	COIL A/W 1.5T/3.0MM HOR 0.8MM WIRE
				L27		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
				L28		065-00010-04	BEAD FERRITE F8 4X2X5MM
				L31		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
				L32		065-00010-04	BEAD FERRITE F8 4X2X5MM
BRKT		012-04100-05	CAP F/THRU 1N SUPPR FLTR STUD MTG				
CV1		028-02100-06	CAP TRIM 3/10P NPO TOP ADJ BLUE MUR TZ				
C2		015-02270-02	CAP CER HIQ 1210 CHIP 27P 5% NPO 200V				
C3		015-02270-02	CAP CER HIQ 1210 CHIP 27P 5% NPO 200V				
C6		015-03100-02	CAP CER HIQ 1210 CHIP 100P 5% NPO 200V				
C7		015-02220-02	CAP CER HIQ 1210 CHIP 22P 5% NPO 200V				
CV8		028-02200-01	CAP TRIM 4/20P N750 TOP ADJ RED MUR TZ				
*C11	LOW		NOT FITTED				
*C11	MID		NOT FITTED				
*C11	HI	015-02100-02	CAP CER HIQ 1210 CHIP 10P 5% NPO 200V				
*C12	LOW		NOT FITTED				
*C12	MID		NOT FITTED				
*C12	HI	015-02100-02	CAP CER HIQ 1210 CHIP 10P 5% NPO 200V				
C15		015-03100-02	CAP CER HIQ 1210 CHIP 100P 5% NPO 200V				
C16		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V				
C17		020-07470-04	CAP ELECT RADL 4M7 25V 20% 8X13MM SOLID				
C18		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V				
C19		020-07470-04	CAP ELECT RADL 4M7 25V 20% 8X13MM SOLID				
C20		015-03100-02	CAP CER HIQ 1210 CHIP 100P 5% NPO 200V				
*C22	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%				
*C22	MID	029-02220-02	CAP MICA 5MM CASE 22P 5%				
*C22	HI	029-02220-02	CAP MICA 5MM CASE 22P 5%				
*C23	LOW	029-02270-02	CAP MICA 5MM CASE 27P 5%				
*C23	MID	029-02180-02	CAP MICA 5MM CASE 18P 5%				
*C23	HI	029-02180-02	CAP MICA 5MM CASE 18P 5%				
*C24	LOW	029-02220-02	CAP MICA 5MM CASE 22P 5%				
*C24	MID	029-02180-02	CAP MICA 5MM CASE 18P 5%				
*C24	HI	029-02180-02	CAP MICA 5MM CASE 18P 5%				
*C27	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%				
*C27	MID	029-02330-02	CAP MICA 5MM CASE 33P 5%				
*C27	HI	029-02270-02	CAP MICA 5MM CASE 27P 5%				
*C28	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%				
*C28	MID	029-02270-02	CAP MICA 5MM CASE 27P 5%				
*C28	HI	029-02270-02	CAP MICA 5MM CASE 27P 5%				
C29		029-03100-02	CAP MICA 5MM CASE 100P 5%				
CV32		028-02100-03	CAP TRIM 2/10P JOHNSON 187-0106-175				
*C33	LOW	015-01560-02	CAP CER HIQ 1210 CHIP 5P6 5% NPO 200V				
*C33	MID		NOT FITTED				
*C33	HI		NOT FITTED				
CV34		028-02100-03	CAP TRIM 2/10P JOHNSON 187-0106-175				
CV35		028-02100-03	CAP TRIM 2/10P JOHNSON 187-0106-175				
*C36	LOW	029-02390-02	CAP MICA 5MM CASE 39P 5%				
*C36	MID	029-02330-02	CAP MICA 5MM CASE 33P 5%				
*C36	HI	029-02270-02	CAP MICA 5MM CASE 27P 5%				
C37		029-02330-02	CAP MICA 5MM CASE 33P 5%				
*C40	LOW	029-02390-02	CAP MICA 5MM CASE 39P 5%				
*C40	MID	029-02330-02	CAP MICA 5MM CASE 33P 5%				
*C40	HI	029-02270-02	CAP MICA 5MM CASE 27P 5%				
C41		029-02330-02	CAP MICA 5MM CASE 33P 5%				
*C42	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%				
*C42	MID	029-02330-02	CAP MICA 5MM CASE 33P 5%				

Ref	Var	IPN	Description	Ref	Var	IPN	Description
L35		051-00005-60	IND HAIRPIN 10MM TALL T859	R87		036-15100-00	RES M/F 0805 CHIP 10K 5%
L36		065-00010-04	BEAD FERRITE F8 4X2X5MM	R88		036-15100-00	RES M/F 0805 CHIP 10K 5%
L37		065-00010-04	BEAD FERRITE F8 4X2X5MM	R89		039-02500-01	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM
L38		051-00005-60	IND HAIRPIN 10MM TALL T859	R90		039-02500-01	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM
L39		051-00005-54	COUPLER WIRELINE TAIT COIL DWG NO 554	R91		039-02500-01	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM
L41		056-00021-04	IND FXD 330NH AXIAL	R92		039-02500-01	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM
*L42	LOW	052-08340-10	COIL A/W 1T/4.0MM SMD 0.8MM WIRE	R93		039-02500-01	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM
*L42	MID	052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM WIRE	R94		039-02500-01	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM
*L42	HI	052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM WIRE	R95		036-14100-00	RES M/F 0805 CHIP 1K 5%
L43		052-08335-10	COIL A/W 1T/3.5MM SMD 0.8MM WIRE	R96		036-14470-00	RES M/F 0805 CHIP 4K7 5%
*L45	LOW	052-08345-20	COIL A/W 2T/4.5MM SMD 0.8MM WIRE	R97		036-14100-00	RES M/F 0805 CHIP 1K 5%
*L45	MID	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM WIRE	R98		036-14390-00	RES M/F 0805 CHIP 3K9 5%
*L45	HI	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM WIRE	R99		036-14100-00	RES M/F 0805 CHIP 1K 5%
*L46	LOW	052-08345-20	COIL A/W 2T/4.5MM SMD 0.8MM WIRE	R100		036-14100-00	RES M/F 0805 CHIP 1K 5%
*L46	MID	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM WIRE	R101		036-12100-00	RES M/F 0805 CHIP 10E 5%
*L46	HI	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM WIRE	R102		036-16220-00	RES M/F 0805 CHIP 220K 5%
*L47	LOW	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM WIRE	R103		036-15330-00	RES M/F 0805 CHIP 33K 5%
*L47	MID	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM WIRE	R104		036-15150-00	RES M/F 0805 CHIP 15K 5%
*L47	HI	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM WIRE	R105		036-16470-00	RES M/F 0805 CHIP 470K 5%
L49		056-00021-04	IND FXD 330NH AXIAL	R106		036-15150-00	RES M/F 0805 CHIP 15K 5%
L51		056-00021-04	IND FXD 330NH AXIAL	R107		036-14390-00	RES M/F 0805 CHIP 3K9 5%
L52		051-00005-53	COIL TAIT NO 553 A/W 10MM LINK T858/9	R108		036-15100-00	RES M/F 0805 CHIP 10K 5%
Q1		000-00022-71	(S) XSTR SD1135 NPN STUD MTG UHF PWR 5W	R109		036-14330-00	RES M/F 0805 CHIP 3K3 5%
Q3		000-00032-79	(S) XSTR MRF654 UHF PWR 15W STUD	R110		036-16100-00	RES M/F 0805 CHIP 100K 5%
Q4		000-00032-67	(S) XSTR MRF648 UHF PWR 60W 6LFL	R111		036-16220-00	RES M/F 0805 CHIP 220K 5%
Q6		000-00032-67	(S) XSTR MRF648 UHF PWR 60W 6LFL	R112		036-16220-00	RES M/F 0805 CHIP 220K 5%
Q7		000-00032-67	(S) XSTR MRF648 UHF PWR 60W 6LFL	R113		036-15270-00	RES M/F 0805 CHIP 27K 5%
Q10		000-00020-70	(S) XSTR BS170 JFET TO-92 SMALL SIG	R115		036-16470-00	RES M/F 0805 CHIP 470K 5%
Q11		000-10008-17	(S) XSTR SMD BC817-25 NPN SOT-23 AF LO PWR	R116		045-04470-01	RES NTC 4K7 20% 5MM DISC
Q12		000-00020-70	(S) XSTR BS170 JFET TO-92 SMALL SIG	R117		036-15150-00	RES M/F 0805 CHIP 15K 5%
Q13		000-10008-17	(S) XSTR SMD BC817-25 NPN SOT-23 AF LO PWR	R118		036-14390-00	RES M/F 0805 CHIP 3K9 5%
Q15		000-10008-17	(S) XSTR SMD BC817-25 NPN SOT-23 AF LO PWR	R119		036-14820-00	RES M/F 0805 CHIP 8K2 5%
Q16		000-00030-95	(S) XSTR 2N6107 PNP TO-220 AF PWR	R120		036-14680-00	RES M/F 0805 CHIP 6K8 5%
Q17		000-10008-57	(S) XSTR SMD BCW70/BC857-215 PNP SOT23 AF	R121		036-14100-00	RES M/F 0805 CHIP 1K 5%
Q18		000-00011-70	(S) XSTR BD136 PNP AF PWR TO126	R122		036-14100-00	RES M/F 0805 CHIP 1K 5%
Q19		000-10008-57	(S) XSTR SMD BCW70/BC857-215 PNP SOT23 AF	R123		036-13470-00	RES M/F 0805 CHIP 470E 5%
Q20		000-10008-17	(S) XSTR SMD BC817-25 NPN SOT-23 AF LO PWR	R124		036-13220-00	RES M/F 0805 CHIP 220E 5%
Q21		000-10008-17	(S) XSTR SMD BC817-25 NPN SOT-23 AF LO PWR	SK1		240-02100-44	SKT COAX MINI JACK PCB MTG ANGLED
R1		030-53470-20	RES FILM AI 470E 5% 0.4W 4X1.6MM				
R2		030-02120-20	RES FILM 12E 5% 0.4W 4X1.6MM				
R3		030-53470-20	RES FILM AI 470E 5% 0.4W 4X1.6MM				
*R7	LOW	030-52330-20	RES FILM AI 33E 5% 0.4W 4X1.6MM				
*R7	MID	030-52330-20	RES FILM AI 33E 5% 0.4W 4X1.6MM				
*R7	HI	030-52680-20	RES FILM AI 68E 5% 0.4W 4X1.6MM				
R8		032-33100-00	RES M/F PWR 100E 5% 1W 10X4MM				
*R11	LOW	032-32100-00	RES M/F PWR 10E 5% 1W 10X4MM				
*R11	MID	032-32100-00	RES M/F PWR 10E 5% 1W 10X4MM				
*R11	HI	032-32220-00	RES M/F PWR 22E 5% 1W 12X4.5MM				
R30		030-53100-20	RES FILM AI 100E 5% 0.4W 4X1.6MM				
R31		030-53100-20	RES FILM AI 100E 5% 0.4W 4X1.6MM				
R32		030-02820-20	RES FILM 82E 5% 0.4W 4X1.6MM				
R33		030-02820-20	RES FILM 82E 5% 0.4W 4X1.6MM				
*R34	LOW	032-33180-01	RES M/F PWR 180E 5% 2.5W 17X5MM				
*R34	MID	032-33180-01	RES M/F PWR 180E 5% 2.5W 17X5MM				
*R34	HI		NOT FITTED				
*R35	LOW	032-33180-01	RES M/F PWR 180E 5% 2.5W 17X5MM				
*R35	MID	032-33180-01	RES M/F PWR 180E 5% 2.5W 17X5MM				
*R35	HI		NOT FITTED				
R36		036-13680-00	RES M/F 0805 CHIP 680E 5%				
R37		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R38		036-17100-00	RES M/F 0805 CHIP 1M 5%				
R42		036-15100-00	RES M/F 0805 CHIP 10K 5%				
RV43		042-05470-09	RES PRESET 50K CERMET 9.5MM SQ FLAT				
R44		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
R47		036-16100-00	RES M/F 0805 CHIP 100K 5%				
RV48		042-04500-08	RES PRESET 5K CERMET 9.5MM SQ FLAT				
R49		036-13680-00	RES M/F 0805 CHIP 680E 5%				
R50		036-13680-00	RES M/F 0805 CHIP 680E 5%				
RV52		042-04500-08	RES PRESET 5K CERMET 9.5MM SQ FLAT				
R55		036-17100-00	RES M/F 0805 CHIP 1M 5%				
R56		036-15100-00	RES M/F 0805 CHIP 10K 5%				
RV57		042-05470-09	RES PRESET 50K CERMET 9.5MM SQ FLAT				
R58		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
R61		036-13220-00	RES M/F 0805 CHIP 220E 5%				
R62		036-14100-00	RES M/F 0805 CHIP 1K 5%				
*RV63	LOW	044-04200-03	RES PRESET MULTITURN 2K 10T PNL MTG				
*RV63	MID	044-04200-03	RES PRESET MULTITURN 2K 10T PNL MTG				
*RV63	HI	044-04200-03	RES PRESET MULTITURN 2K 10T PNL MTG				
R64		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
R67		036-15100-00	RES M/F 0805 CHIP 10K 5%				
R68		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
R69		036-12100-00	RES M/F 0805 CHIP 10E 5%				
RV69		042-04220-02	RES PRESET 2K CERMET 9.5MM SQ FLAT				
R70		036-13220-00	RES M/F 0805 CHIP 220E 5%				
R72		045-04470-01	RES NTC 4K7 20% 5MM DISC				
R73		036-16220-00	RES M/F 0805 CHIP 220K 5%				
RV74		042-05100-10	RES PRESET 10K CERMET 9.5MM SQ FLAT				
R77		036-14220-00	RES M/F 0805 CHIP 2K2 5%				
R78		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R80		036-13100-00	RES M/F 0805 CHIP 100E 5%				
R81		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R82		036-14220-00	RES M/F 0805 CHIP 2K2 5%				
R83		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R84		036-14220-00	RES M/F 0805 CHIP 2K2 5%				
R85		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R86		036-14100-00	RES M/F 0805 CHIP 1K 5%				

T859 Mechanical & Miscellaneous Parts (220-01159-01)

IPN	Legend	Description	IPN	Legend	Description
012-04100-05	30	CAP F/THRU 1N SUPPR FLTR S-MTG	319-30033-00	13	SPACER A4M1339 UHF PA
065-00010-20		BEAD FERRITE BALUN 4B1 PHILIPS Placed on DC+ power cables.	345-00040-16	24	SCRW M3X20MM P/POZ ST BZ
070-01001-00	23	D-RANGE 15 WAY COMPL T800	349-00020-07	6	SCRW 4-40 X 5/16 P/POZ T/T BLK
070-02003-00		LED RED COMPL T800 PA "High Rev/Low Fwd Power" LEDs - D11/D5	349-00020-09	11	SCRW T/T 4-40X3/8 IN P/POZ BLK
070-02004-00		LED GREEN COMPL T800 PA "Supply" LED - D10	349-00020-36	43	LIM)SCREW TT M3X8m PANTORX BLK
201-00030-01		WIRE T/C 7/0.2 PVC BROWN Forward power alarm.	349-00020-43	34	SCRW T/T M4X12MM P/POZ BZ
201-00030-03		WIRE T/C 7/0.2 PVC ORANGE Reverse power meter.	349-00020-49	32	SCRW T/T M4X35MM P/POZ BZ
201-00030-04		WIRE T/C 7/0.2 PVC YEL Reverse power.	349-00020-50	21	SCRW T/T 4-40 * 5/8 P/POZ BLK
201-00030-05		WIRE T/C 7/0.2 PVC GRN Forward power meter.	352-00010-29	40	NUT M4 NYLOC HEX
201-00030-06		WIRE T/C 7/0.2 PVC BLUE Tx-Key.	352-00010-35	15	NUT 8-32 UNC HEX XSTR MTG
201-00030-07		WIRE T/C 7/0.2 PVC VIOLET Reverse power alarm.	353-00010-10	10	WSHR M3 FLAT 7MM*0.6MM ST BZ
201-00030-09		WIRE T/C 7/0.2 PVC WHITE Temperature sense.	353-00010-24	39	WSHR M4x8mm Flat
201-00030-10		WIRE T/C 7/0.2 PVC BLACK Forward power.	356-00010-01	18	TAG SOLDER 3MM SHORT M6132/3.2
201-00050-12		AUTO 152 RED 28/0.3 PVC DC+ from D-range PCB.	356-00010-03	5	TAG SOLDER 3MM LONG M614/3.2
201-00050-20		AUTO 152 BLACK 28/0.3 PVC DC- from D-range PCB.	357-00010-45	33	CLAMP CABLE 4.8MM P CLIP
219-02592-00		CABLE ASSY RG223/U N TO BNC Exciter/PA connecting cable.	360-00010-41	42	BUSH SHORTY BLK
219-02599-00		CABLE ASSY PA INPUT REAR DRIVE RF input cable/connector assembly.	362-00010-07	7	GASKET SIL INSULATING TO-220
220-01152-00	2	PCB T858/859 DIRNL COUPLER	362-00010-13	9	BUSH INSULATING 1.1MM TOP HAT
220-01159-01	1	PCB T859 100W PA A1C674	362-00010-33	41	GROMMET LED MTG 3MM
240-02100-06	26	SKT COAX N TYPE PNL MTG OP-TER	365-00100-20		LABEL WHITE S/A 28X11MM
240-02100-17	27	SKT COAX BNC PNL JAC CRP RG316 Part of 219-02599-00 sub-assembly.	365-01540-00		LABEL PA TYPE APPL/SERIAL NO
240-06010-15	25	BLOCK LATCHING 15W D RANGE	369-00010-14		TIE CABLE NYLON 100*2.6MM
258-00010-03	31	FAN 12V 119X119X25MM TUBE AX	399-00010-51		BAG PLASTIC 75*100MM
302-05204-00	29	BRKT A3M2314 F/THRU MTG T859	400-00020-07		SLEEING 2MM SIL RUBBER
303-23117-00	44	COVER SIDE COMPL A2M2223	400-00020-09		SLEEING 3MM SIL RUBBER
303-50005-00	36	CONTACT A4M2311 SPRING EARTH	400-00020-30		HEATSHRINK 3MM
308-01007-01	38	HANDLE BASE STATION SERIES II	410-00010-43		PKG T296 AMPAC REF 73-46
308-13085-01	4	HSINK DIECAST T858 50W PA			
308-13086-00	19	HSINK A3M2271 2MM W/LINE PA			
316-06651-00	37	PNL PA NO INP DRV SER II DBL			
316-85018-00	27	PIN A4M1397 COAX CONDUCTOR			
319-01147-00	3	SHIELD A3M2224 WALL T859 PA			
319-01148-00	35	SHIELD A3M2225 LID T859 PA			

Note

The following electrical components are also included in the mechanical assembly drawing to help identify certain mechanical components.

000-00022-71	14	(S) XSTR SD1135 NPN STUD MTG UHF PWR 5W - Q1
000-00030-95	8	(S) XSTR 2N6107 PNP TO-220 AF PWR - Q16
000-00032-79	16	(S) XSTR MRF654 UHF PWR 15W STUD - Q3
000-00032-67	17	(S) XSTR MRF648 UHF PWR 60W 6LFL Q4, Q6, Q7
039-02500-01	12	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM - R89/90/91/92/93/94
051-00005-39	20	COUPLER WIRELINE TAIT COIL DWG NO 539 - L19
051-00005-54	22	COUPLER WIRELINE TAIT COIL DWG NO 554 - L39

replace A4 pages D5.3.9/D5.3.10 with A3 pages D5.3.9/D5.3.10

replace A4 pages D5.3.9/D5.3.10 with A3 pages D5.3.9/D5.3.10

T859 Grid Reference Index (IPN 220-01159-01)

How To Use This Grid Reference Index

The first digit in the PCB layout reference is a "1" or "2", indicating the top or bottom side layout respectively, and the last two characters give the location of the component on that diagram.

The first digit in the circuit diagram reference is the sheet number, and the last two characters give the location of the component on that sheet.

Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit
CV1	1:Q9	1-E7	C85	1:V9	2-B4			2-G4			2-A3
C2	1:Q8	1-E7	C86	1:W6	2-G3			2-N6			2-A8
C3	1:R8	1-E7	C87	1:T2	2-E2			2-N5	Q1	1:Q8	1-C7
C6	1:S8	1-B8	C90	1:V7	2-C0			2-F1	Q3	1:Q6	1-A2
C7	1:Q7	1-C8	C91	1:W8	2-M2	IC4	1:V5	2-H1	Q4	1:Q4	1-D2
CV8	1:R7	1-B7	C92	1:U6	2-P2	L1	1:R9	1-E7	Q6	1:K8	1-H5
C15	1:S5	1-B2	C93	1:U6	2-N2	L2	1:P9	1-D7	Q7	1:K4	1-H2
C16	1:S5	1-B3	C96	1:U5	2-K0	L3	1:P9	1-D7	Q10	1:V10	2-B8
C17	1:S6	1-C3	C97	1:J10	1-Q8	L5	1:T8	1-D9	Q11	1:U10	2-C8
C18	1:T3	1-C3	C98	1:K10	1-R8	L6	1:R7	1-C8	Q12	1:V9	2-B5
C19	1:S2	1-D3	C99	1:U6	2-L0	L7	1:P7	1-B7	Q13	1:U9	2-C4
C20	1:S3	1-E3	C100	1:U6	2-N1	L8	1:P8	1-B7	Q15	1:U8	2-Q2
*C22	1:Q5	1-B2	C101	1:V3	2-N0	L11	1:S7	1-A4	Q16	1:T10	2-R2
*C23	1:Q5	1-C2	C102	1:U8	2-Q2	L12	1:S5	1-A3	Q17	1:T5	2-R7
*C24	1:R5	1-C1	C103	1:U8	2-Q1	L13	1:R5	1-A2	Q18	1:T5	2-R8
*C27	1:Q3	1-D2	C104	1:T6	2-R3	L14	1:Q3	1-E2	Q19	1:V4	2-P8
*C28	1:R3	1-E2	C105	1:T9	2-R2	L15	1:K8	1-K5	Q20	1:U5	2-Q7
C29	1:P3	1-E2	C106	1:T8	2-R1	L16	1:S4	1-C3	Q21	1:V4	2-Q5
CV32	1:P2	1-E1	C108	1:T4	2-J8	L17	1:S3	1-D3	R1	1:R10	1-F7
*C33	1:P3	1-F1	C109	1:T4	2-H3	L18	1:R3	1-D2	R2	1:R9	1-F7
CV34	1:M4	1-G2	C110	1:E3	1-N3	L19	1:N6	1-F3	R3	1:R9	1-F7
CV35	1:M8	1-G5	C111	1:N8	1-F5	L20	1:F3	1-M2	R7	1:R9	1-D7
*C36	1:L8	1-G5	C112	1:F3	1-M1	L21	1:P5	1-B2	R8	1:S7	1-C8
C37	1:L8	1-H5	C113	1:D3	1-P1	L22	1:P6	1-B1	R11	1:R6	1-A7
*C40	1:L4	1-G1	C114	1:V10	2-A8	L23	1:K4	1-K2	R30	1:G9	1-M5
C41	1:L3	1-H1	C115	1:V9	2-A4	L24	1:D3	1-P2	R31	1:E7	1-N6
*C42	1:K4	1-J1	C116	1:V3	2-N1	L25	1:M3	1-F1	R32	1:D6	1-Q4
*C43	1:K3	1-J1	C117	1:W5	2-P8	L26	1:M8	1-F5	R33	1:D6	1-R4
C45	1:K4	1-J3	C118	1:V4	2-P8	L27	1:L9	1-G5	*R34	See Note	1-G5
C46	1:K7	1-J6	C119	1:U4	2-P7	L28	1:M9	1-G5	*R35	See Note	1-H5
*C47	1:K8	1-J5	C120	1:U4	2-P6	L31	1:M3	1-G2	R36	1:W9	2-C7
*C49	1:K8	1-J5	C121	1:V4	2-P5	L32	1:M2	1-G1	R37	1:W4	2-K0
C50	1:H8	1-K5	C122	1:V4	2-P5	L35	1:J7	1-J6	R38	1:W5	2-E8
CV51	1:H8	1-L5	C123	1:T5	2-Q7	L36	1:J6	1-J6	R42	1:V5	2-F8
*C52	1:J8	1-K5	C124	1:U5	2-Q7	L37	1:J5	1-J3	RV43	1:V1	2-G6
C54	1:K6	1-K3	C125	1:T5	2-R8	L38	1:J4	1-J2	R44	1:U6	2-G6
C55	1:K6	1-K3	C126	1:U3	2-N6	L39	1:H6	1-L4	R47	1:W5	2-F8
C56	1:H4	1-L2	C127	1:U3	2-M7	L41	1:F9	1-N5	RV48	1:W1	2-F8
CV57	1:H3	1-L1	C128	1:V3	2-M4	*L42	1:D7	1-P4	R49	1:W10	2-B6
*C58	1:J3	1-K1	C129	1:U3	2-N5	L43	1:C7	1-Q4	R50	1:W8	2-C5
C60	1:E9	1-N5	C130	1:V10	2-C8	*L45	1:C8	1-P5	RV52	1:T1	2-F5
C61	1:F9	1-N5	C131	1:V9	2-C4	*L46	1:C9	1-Q5	R55	1:V6	2-D4
*C62	See Note	1-P5	D1	1:F6	1-M6	*L47	1:B8	1-Q5	R56	1:V6	2-E4
*C63	1:C9	1-P5	D2	1:E9	1-N5	L49	1:F6	1-M6	RV57	1:S1	2-E3
*C65	1:C9	1-Q5	D3	1:S3	2-B1	L51	1:K10	1-Q9	R58	1:U6	2-G5
*C66	1:B8	1-R5	D5	1:W9	2-C8	L52	1:C7	1-P4	R61	1:V8	2-E0
C67	See Note	1-P4	D6	1:U2	2-G6	PL1	1:J5	2-A2	R62	1:V8	2-D0
C68	1:D7	1-Q4	D10	1:W10	2-B5			2-A1	*RV63	1:V6	2-M2
C69	1:W6	2-G1	D11	1:W9	2-C5			2-A2	R64	1:U6	2-N2
*C70	1:D6	1-Q4	D13	1:T2	2-E2			2-A2	R67	1:W5	2-K2
C70A	See Note	2-J1	D17	1:V3	2-N1			2-A1	R68	1:U5	2-L2
C72	1:E6	1-L6			2-N1			2-A9	R69	1:V6	2-G1
C73	1:F6	1-L6	IC1	1:V6	2-E8			2-A6	RV69	1:V2	2-H1
C76	1:V10	2-B8			2-D5			2-A0	R70	1:V5	2-G1
C77	1:V10	2-B8			2-P2			2-A0	R72	1:J10	1-Q8
C78	1:U10	2-C7			2-L1			2-A1	R73	1:U5	2-L0
C80	1:U6	2-H8			2-G1			2-A1	RV74	1:W2	2-M0
C81	1:U2	2-F6	IC2	1:V8	2-D0			2-A0	R77	1:V6	2-P3
C84	1:V9	2-B4	IC3	1:U4	2-H8			2-A5	R78	1:U8	2-Q2

<u>Device</u>	<u>PCB</u>	<u>Circuit</u>	<u>Device</u>	<u>PCB</u>	<u>Circuit</u>	<u>Device</u>	<u>PCB</u>	<u>Circuit</u>	<u>Device</u>	<u>PCB</u>	<u>Circuit</u>
R80	1:U8	2-Q3									
R81	1:W5	2-D7									
R82	1:V5	2-D8									
R83	1:V6	2-C4									
R84	1:V6	2-C4									
R85	1:T6	2-E3									
R86	1:W3	2-G7									
R87	1:T3	2-J8									
R88	1:T4	2-H3									
R89	1:N10	1-E5									
R90	1:G1	1-M1									
R91	1:F1	1-N1									
R92	1:P10	1-D5									
R93	1:D1	1-P2									
R94	1:C1	1-Q2									
R95	1:S1	2-C3									
R96	1:U2	2-F5									
R97	1:U2	2-D6									
R98	1:U3	2-J9									
R99	1:T4	2-H4									
R100	1:U5	2-L2									
R101	1:W8	2-M2									
R102	1:U2	2-N8									
R103	1:U2	2-N6									
R104	1:U4	2-P7									
R105	1:U3	2-N7									
R106	1:U4	2-P7									
R107	1:U4	2-P6									
R108	1:W4	2-N8									
R109	1:V3	2-P9									
R110	1:U3	2-M5									
R111	1:U3	2-M4									
R112	1:U2	2-M4									
R113	1:U3	2-N4									
R115	1:V3	2-N5									
R116	1:V3	2-M5									
R117	1:V3	2-P5									
R118	1:V4	2-P4									
R119	1:U5	2-Q7									
R120	1:U5	2-Q8									
R121	1:T5	2-Q8									
R122	1:V5	2-M6									
R123	1:W7	2-M3									
R124	1:W7	2-M2									
SK1	1:R10	1-G7									

Note:

*C62 & C67 are mounted on the Directional Coupler PCB (220-01152-00).

C70A with the grid references of:

PCB 1:V5 & **Circuit** 2-J1 is incorrectly shown in the artwork as C70.

*R34 & *R35 are mounted across the base and emitter of Q6.

T859 Parts List (IPN 220-01422-03)

How To Use This Parts List

The components listed in this parts list are divided into two main types: those with a circuit reference (e.g. C2, D1, R121, etc.) and those without (miscellaneous and mechanical).

Those with a circuit reference are grouped in alphabetical order and then in numerical order within each group. Each component entry comprises three or four columns: the circuit reference, variant (if applicable), IPN and description. A number in the variant column indicates that this is a variant component which is fitted only to the product type listed. Static sensitive devices are indicated by an (S) at the start of the description column.

The miscellaneous and mechanical section lists the variant and common parts in IPN order. Where possible, a number in the legend column indicates their position in the mechanical assembly drawing.

The Parts List Amendments box below lists component changes that took place after the parts list and diagrams in this section were compiled. These changes (e.g. value changes, added/deleted components, etc.) are listed by circuit reference in alphanumeric order and supersede the information given in the parts list or diagrams. Components without circuit references are listed in IPN order.

Parts List Amendments

C142	Changed from 4n7 (IPN 015-24470-08) to 33nF (IPN 015-25330-08) to improve cyclic keying (711105).
C147	Changed from 1nF (IPN 015-24100-08) to 33nF (IPN 015-25330-08) to improve cyclic keying (711104).
C173	Deleted - not required for circuit performance (711141).
#C247, #C273	T859-10-0000: changed from 15pF (IPN 015-02150-03) to 12pF (IPN 015-02120-03) to reduce the maximum output power and reduce excessive power at the top of the frequency band (711138).
#C256, #C257, #C269, #C270	T859-10-0000: changed from 39pF (IPN 029-02390-02) to 47pF (IPN 029-02470-02) to reduce the maximum output power and reduce excessive power at the top of the frequency band (711138).
#C257, #C270	T859-30-0000: changed from 22pF (IPN 029-02220-02) to 33pF (IPN 029-02330-02) to reduce the maximum output power and instabilities across the 480-520MHz frequency band (711140). T859-30-0000: changed from 33pF (IPN 029-02330-02) to 27pF (IPN 029-02270-02) to reduce the maximum output power and instabilities across the 480-520MHz frequency band (711158).
D101	Changed from MR750/SR2607 (IPN 001-00011-60) to MR2520L (IPN 001-00012-90) to provide overvoltage transient suppression (750087/88/89/90/91/92 and 711129).
Resistors Added	Two 4E7 mylar film resistors (IPN 032-31470-01 - no circuit references) were added, one from Q217 base to ground (L247) and the other from Q216 base to ground (L238) to reduce the maximum output power and instabilities across the 400-520MHz frequency band (711158).
R144	Changed from 1k (IPN 036-14100-10) to 18k (IPN 036-15180-00) to improve cyclic keying (711104).
R158	Changed from 22k (IPN 036-15220-00) to 18k (IPN 036-15180-00) to improve cyclic keying (711105).
R168	Changed from 2k7 (IPN 036-14270-10) to 4k7 (IPN 036-14470-10) to reduce the maximum output power and reduce excessive power at the top of the frequency band (711138/39/40). Changed from 4k7 (IPN 036-14470-10) to 5k1 (IPN 036-14510-10) to limit the maximum output power and reduce instabilities (711181/82/83).
R170	Changed from 2k2 (IPN 036-14220-00) to 5k6 (IPN 036-14560-00) to reduce the maximum output power and reduce excessive power at the top of the frequency band (711138/39/40). T859-10-0000: changed from 5k6 (IPN 036-14560-00) to 4k7 (IPN 036-14470-10) } to limit the maximum output power and reduce instabilities - circuit reference changed to #R170 (711182/83). T859-30-0000: changed from 5k6 (IPN 036-14560-00) to 5k1 (IPN 036-14510-10) } T859-20-0000: value unchanged; circuit reference changed to #R170
349-00020-36	The two M3x8 Torx screws which secure the module into the rack frame have been replaced by M3x8 Pozidriv screws (IPN 349-00020-55) (750101/2/3/5/6).

Parts List Amendments - Continued

This page is provided for entering future amendments to the parts list.

Ref	Var	IPN	Description	Ref	Var	IPN	Description
C100		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C247	10	015-02150-03	CAP CER 15P 5% 500V HIQ GRH111
C101		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C247	20	015-02120-03	CAP CER 12P 5% 500V HIQ GRH111
C102		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C247	30	015-02120-03	CAP CER 12P 5% 500V HIQ GRH111
C103		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C249		015-02150-03	CAP CER 15P 5% 500V HIQ GRH111
C104		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C250		015-03100-03	CAP CER 100P 5% 500VHIQ GRH111
C105		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C252	10	029-02560-02	CAP MICA 5 CASE 56P 5%
C107		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C252	20	029-02560-02	CAP MICA 5 CASE 56P 5%
C108		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C252	30	029-02470-02	CAP MICA 5 CASE 47P 5%
C109		014-07100-02	CAP TANT CHIP 1U0 3.2 X 1.6MM	#C253	10	029-02560-02	CAP MICA 5 CASE 56P 5%
C110		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C253	20	029-02560-02	CAP MICA 5 CASE 56P 5%
C111		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C253	30	029-02470-02	CAP MICA 5 CASE 47P 5%
C112		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	C254		029-02150-02	CAP MICA 5 CASE 15P 5%
C113		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C256	10	029-02390-02	CAP MICA 5 CASE 39P 5%
C114		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C256	20	029-02330-02	CAP MICA 5 CASE 33P 5%
C115		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C256	30	029-02220-02	CAP MICA 5 CASE 22P 5%
C116		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	#C257	10	029-02390-02	CAP MICA 5 CASE 39P 5%
C117		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C257	20	029-02330-02	CAP MICA 5 CASE 33P 5%
C119		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C257	30	029-02220-02	CAP MICA 5 CASE 22P 5%
C120		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C258		015-03100-02	CAP CER HIQ1210 100P 5%NPO200V
C121		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C259		015-06100-08	CAP CER 1206 100N 10% X7R 50V
C122		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C260		014-07470-04	CAP TANT SMD 4U7 50V 20%
C123		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C261		015-03100-02	CAP CER HIQ1210 100P 5%NPO200V
C124		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C262		015-03100-03	CAP CER 100P 5% 500VHIQ GRH111
C125		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C263		029-02150-02	CAP MICA 5 CASE 15P 5%
C126		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C264	10	029-02560-02	CAP MICA 5 CASE 56P 5%
C127		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C264	20	029-02560-02	CAP MICA 5 CASE 56P 5%
C128		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C264	30	029-02470-02	CAP MICA 5 CASE 47P 5%
C129		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C265	10	029-02560-02	CAP MICA 5 CASE 56P 5%
C130		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C265	20	029-02560-02	CAP MICA 5 CASE 56P 5%
C131		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C265	30	029-02470-02	CAP MICA 5 CASE 47P 5%
C132		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C268		015-02150-03	CAP CER 15P 5% 500V HIQ GRH111
C133		015-06100-08	CAP CER 1206 100N 10% X7R 50V	#C269	10	029-02390-02	CAP MICA 5 CASE 39P 5%
%C134		014-18220-02	LJCAP TANT SMD 22U 20% 35V	#C269	20	029-02330-02	CAP MICA 5 CASE 33P 5%
C136		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C269	30	029-02220-02	CAP MICA 5 CASE 22P 5%
C137		015-26100-08	CAP CER 0805 100N 10% X7R 50V	#C270	10	029-02390-02	CAP MICA 5 CASE 39P 5%
C138		015-25220-08	CAP CER 0805 22N 10% X7R 50V	#C270	20	029-02330-02	CAP MICA 5 CASE 33P 5%
C139		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C270	30	029-02220-02	CAP MICA 5 CASE 22P 5%
C140		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C272		014-07470-04	CAP TANT SMD 4U7 50V 20%
C141		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C273	10	015-02150-03	CAP CER 15P 5% 500V HIQ GRH111
C142		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	#C273	20	015-02120-03	CAP CER 12P 5% 500V HIQ GRH111
C143		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C273	30	015-02120-03	CAP CER 12P 5% 500V HIQ GRH111
C144		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C274		015-03100-03	CAP CER 100P 5% 500VHIQ GRH111
C145		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	C275		015-24470-08	CAP CER 0805 4N7 10% X7R 50V
C146		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C276		015-23150-01	CAP CER 0805 150P 5% NPO 50V
C147		015-24100-08	CAP CER 0805 1N 10% X7R 50V	#C277	10	029-02120-01	CAP MICA 10 CASE 12P 5%
C148		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C277	20	029-02100-01	CAP MICA 10 CASE 10P 10%
C149		015-25100-08	CAP CER 0805 10N 10% X7R 50V	#C277	30	029-02100-01	CAP MICA 10 CASE 10P 10%
C150		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C278	10	029-02120-01	CAP MICA 10 CASE 12P 5%
C151		015-27100-10	CAP CER 0805 1M+80-20% Y5V 16V	#C278	20	029-02100-01	CAP MICA 10 CASE 10P 10%
C152		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C278	30	029-02100-01	CAP MICA 10 CASE 10P 10%
C153		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C280	10	029-01560-02	CAP MICA 5 CASE 5P6 5%
C154		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C280	20	029-01470-02	CAP MICA 5 CASE 4P7 5%
C156		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C280	30	029-01470-02	CAP MICA 5 CASE 4P7 5%
C157		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C282		015-21220-01	CAP CER 0805 2P2+-1/4P NPO 50V
C158		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C283	10	015-21470-01	CAP CER 0805 4P7+-1/4P NPO 50V
C159		015-26100-08	CAP CER 0805 100N 10% X7R 50V	#C283	20	015-21390-01	CAP CER 0805 3P9+-1/4P NPO 50V
C161		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	#C283	30	015-21390-01	CAP CER 0805 3P9+-1/4P NPO 50V
C162		014-18220-02	LJCAP TANT SMD 22U 20% 35V	C284		015-23150-01	CAP CER 0805 150P 5% NPO 50V
C163		014-18220-02	LJCAP TANT SMD 22U 20% 35V	#C285	10	015-21390-01	CAP CER 0805 3P9+-1/4P NPO 50V
C164		015-24100-08	CAP CER 0805 1N 10% X7R 50V	#C285	20	015-21330-01	CAP CER 0805 3P3+-1/4P NPO 50V
C166		015-06100-08	CAP CER 1206 100N 10% X7R 50V	#C285	30	015-21330-01	CAP CER 0805 3P3+-1/4P NPO 50V
C167		015-06100-08	CAP CER 1206 100N 10% X7R 50V	C286		015-21220-01	CAP CER 0805 2P2+-1/4P NPO 50V
C168		014-08100-00	CAP TANT CHIP 10M 16VW +-20%	C287		015-24470-08	CAP CER 0805 4N7 10% X7R 50V
C169		015-06100-08	CAP CER 1206 100N 10% X7R 50V	C293		029-03100-02	CAP MICA 5 CASE 100P 5%
C172		015-26100-08	CAP CER 0805 100N 10% X7R 50V	D101		001-00011-60	S) DIODE MR750 OR SR2607
C173		014-07100-02	CAP TANT CHIP 1U0 3.2 X 1.6MM	D105		001-10000-70	S) DIODE SMD BAV70 D-SW SOT23
C174		015-25100-08	CAP CER 0805 10N 10% X7R 50V	D110		001-10000-70	S) DIODE SMD BAV70 D-SW SOT23
C175		015-26100-08	CAP CER 0805 100N 10% X7R 50V	D112		008-00014-79	S)LED 3MM RED WITH WIRE
C176		014-07470-03	LJ CAP TANT SMD 4U7 35V 20%	D114		008-00014-79	S)LED 3MM RED WITH WIRE
C177		015-25100-08	CAP CER 0805 10N 10% X7R 50V	D115		001-10000-70	S) DIODE SMD BAV70 D-SW SOT23
C178		015-22470-01	CAP CER 0805 47P 5% NPO 50V	D120		001-10000-70	S) DIODE SMD BAV70 D-SW SOT23
C197		015-25100-08	CAP CER 0805 10N 10% X7R 50V	D190		008-00014-80	S)LED 3MM GREEN WITH WIRE
C198		015-25100-08	CAP CER 0805 10N 10% X7R 50V	D205		001-10066-00	DIODE SCHOTTKY HSMS2815
C200		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	D206		001-10066-00	DIODE SCHOTTKY HSMS2815
C201		015-23100-01	CAP CER 0805 100P 5% NPO 50V	IC100		002-10003-24	S) IC SMD 324 4X O-AMP SO14
C202		015-23100-01	CAP CER 0805 100P 5% NPO 50V	IC105		002-10003-24	S) IC SMD 324 4X O-AMP SO14
C203		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	IC110		002-10006-62	S)IC SMD LMC662CM 2X O-AMP
C204		015-23100-01	CAP CER 0805 100P 5% NPO 50V	IC130		002-10003-17	(S) IC LM317L REG SO-8 100MA
C205		015-24100-08	CAP CER 0805 1N 10% X7R 50V	IC140		002-12951-00	IC SMD LP2951CM ADJ VLTGE REG
C206		015-23100-01	CAP CER 0805 100P 5% NPO 50V	IC200		002-10003-58	S) IC SMD LM358 DUAL O-AMP
C207		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#IC210	10	004-00687-62	MODULE M68762L 400-450MHZ 30W
C208		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#IC210	20	004-00687-61	MODULE M68762H 440-490MHZ 30W
C209		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	#IC210	30	004-00687-63	MODULE M68762SH 470-520MHZ 30W
C210		015-23100-01	CAP CER 0805 100P 5% NPO 50V	L120		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C211		015-24100-08	CAP CER 0805 1N 10% X7R 50V	L161		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C214		015-23680-08	CAP CER 0805 680P 10% X7R 50V	L162		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C215		015-06100-08	CAP CER 1206 100N 10% X7R 50V	L200		056-10330-02	(L) IND SMD 330NH
C218		015-03100-06	CAP CER 1210 100P NPO500VGRM42	L201		056-10330-02	(L) IND SMD 330NH
C219		014-07470-04	CAP TANT SMD 4U7 50V 20%	L202		056-10330-02	(L) IND SMD 330NH
C220		015-06100-08	CAP CER 1206 100N 10% X7R 50V	L203		056-10330-02	(L) IND SMD 330NH
C221		015-03100-03	CAP CER 100P 5% 500VHIQ GRH111	L208		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C222		015-03100-03	CAP CER 100P 5% 500VHIQ GRH111	L209		052-08340-40	COIL A/W 4T/4.0MM SMD 0.8MM
C223		015-06100-08	CAP CER 1206 100N 10% X7R 50V	L210		052-08340-40	COIL A/W 4T/4.0MM SMD 0.8MM
C224		014-07470-04	CAP TANT SMD 4U7 50V 20%	L211		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C225		015-06100-08	CAP CER 1206 100N 10% X7R 50V	L212		052-08340-40	COIL A/W 4T/4.0MM SMD 0.8MM
C226		015-03100-03	CAP CER 100P 5% 500VHIQ GRH111				
C227		015-23100-01	CAP CER 0805 100P 5% NPO 50V				
C228		015-03100-02	CAP CER HIQ1210 100P 5%NPO200V				

Ref	Var	IPN	Description	Ref	Var	IPN	Description
%L213		056-10330-02	(L) IND SMD 330NH	R137		036-15150-00	RES M/F 0805 15K 5%
L235		051-00005-60	IND HAIRPIN 10MM TALL T859	R138		036-15150-00	RES M/F 0805 15K 5%
L237		052-08340-50	COIL A/W 5T/4.0MM SMD 0.8MM	R139		036-14390-10	RES M/F 0805 3K9 1%
L238		065-10009-20	BEAD FER SMD BDS 3/3/8.9-4S2	R140		036-15150-00	RES M/F 0805 15K 5%
L239		052-08340-50	COIL A/W 5T/4.0MM SMD 0.8MM	R141		036-14390-10	RES M/F 0805 3K9 1%
L240		051-00649-10	HYBRID COUPLER 0.4-1G 100W 3DB	R142		036-14820-10	RES M/F 0805 8K2 1%
L241		051-00649-10	HYBRID COUPLER 0.4-1G 100W 3DB	R143		036-14680-10	RES M/F 0805 6K8 1%
L242		052-08340-50	COIL A/W 5T/4.0MM SMD 0.8MM	R144		036-14100-10	RES M/F 0805 1K 1%
L243		051-00005-60	IND HAIRPIN 10MM TALL T859	%R145		036-10000-00	RES M/F 0805 ZERO OHM
L246		052-08340-50	COIL A/W 5T/4.0MM SMD 0.8MM	R146		036-13470-00	RES M/F 0805 470E 5%
L247		065-10009-20	BEAD FER SMD BDS 3/3/8.9-4S2	R147		036-13220-10	RES 0805 220E 1%
L253		056-10330-02	(L) IND SMD 330NH	R148		036-10000-00	RES M/F 0805 ZERO OHM
#L254	10	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM	R149		036-14560-00	RES M/F 0805 5K6 5%
#L254	20	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM	R150		036-14470-10	RES M/F 0805 4K7 1%
#L254	30	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM	R151		036-13220-10	RES 0805 220E 1%
#L255	10	052-08345-20	COIL A/W 2T/4.5MM SMD 0.8MM	R152		036-13100-10	RES M/F 0805 100E 1%
#L255	20	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM	R153		036-14220-00	RES M/F 0805 2K2 5%
#L255	30	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM	R154		036-14220-00	RES M/F 0805 2K2 5%
#L256	10	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM	R155		036-15100-10	RES M/F 0805 10K 1%
#L256	20	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM	R156		036-14180-00	RES M/F 0805 1K8 5%
#L256	30	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM	R157		036-15470-10	RES M/F 0805 47K 1%
L257		056-10330-02	(L) IND SMD 330NH	R158		036-15220-00	RES M/F 0805 22K 5%
#L258	10	052-08325-10	COIL A/W 1T/2.5MM SMD 0.8MM	R159		036-13470-00	RES M/F 0805 470E 5%
#L258	20	052-08320-10	COIL A/W 1T/2.0MM SMD 0.8MM	R160		036-03180-10	RES 180R 1W SMD 2512
#L258	30	052-08320-10	COIL A/W 1T/2.0MM SMD 0.8MM	R161		036-15100-10	RES M/F 0805 10K 1%
L259		052-08320-10	COIL A/W 1T/2.0MM SMD 0.8MM	R162		036-15100-10	RES M/F 0805 10K 1%
L260		052-08335-10	COIL A/W 1T/3.5MM SMD 0.8MM	R163		036-13100-10	RES M/F 0805 100E 1%
LINK200		051-00640-02	LNK 65.5 COP STPL C/W SLCN SLV	R164		036-03180-10	RES 180R 1W SMD 2512
P200		356-00010-26	PIN TRACK HARWIN FOR 1.6MM PCB	R165		036-03100-02	RES 100E 1206 200V 250MW RC01
P201		356-00010-26	PIN TRACK HARWIN FOR 1.6MM PCB	R166		036-15100-10	RES M/F 0805 10K 1%
P250		356-00010-26	PIN TRACK HARWIN FOR 1.6MM PCB	R167		036-13470-00	RES M/F 0805 470E 5%
P260		356-00010-26	PIN TRACK HARWIN FOR 1.6MM PCB	R168		036-14270-10	RES M/F 0805 2K7 1%
P270		356-00010-26	PIN TRACK HARWIN FOR 1.6MM PCB	R169		036-15100-10	RES M/F 0805 10K 1%
PL101		070-01001-00	D-RANGE 15 WAY COMPL T800	R170		036-14220-00	RES M/F 0805 2K2 5%
PL110		240-00021-03	LIM) HEADER 2X7 WAY SMD	R171		036-13150-10	RES M/F 0805 150E 1%
Q100		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R172		036-16180-00	RES M/F 0805 180K 5%
Q101		000-10017-00	LS) XSTR SMD BF170LT1 SOT23	R173		036-15100-10	RES M/F 0805 10K 1%
Q102		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R175		036-15220-00	RES M/F 0805 22K 5%
Q103		000-10017-00	LS) XSTR SMD BF170LT1 SOT23	R176		036-15100-10	RES M/F 0805 10K 1%
Q110		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R177		036-15100-10	RES M/F 0805 10K 1%
Q111		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R178		036-14100-10	RES M/F 0805 1K 1%
Q112		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R179		036-14100-10	RES M/F 0805 1K 1%
Q113		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R180		036-14100-10	RES M/F 0805 1K 1%
Q114		000-10008-69	S) XSTR SMD BC869 PNP 1W SOT89	R181		036-15100-10	RES M/F 0805 10K 1%
Q120		000-10008-48	S) XSTR SMD BCW60 NPN SOT23 SS	R182		036-16220-00	RES M/F 0805 20K 5%
Q121		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R183		036-15100-10	RES M/F 0805 10K 1%
Q122		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R184		036-14470-10	RES M/F 0805 4K7 1%
Q123		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R185		036-16100-10	RES M/F 0805 100K 1%
Q124		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R186		036-15100-10	RES M/F 0805 10K 1%
Q125		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R187		036-16150-00	RES M/F 0805 150K 5%
Q126		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R188		036-16100-10	RES M/F 0805 100K 1%
Q127		000-10008-48	S) XSTR SMD BCW60 NPN SOT23 SS	R189		036-14100-10	RES M/F 0805 1K 1%
Q128		000-00030-95	S) XSTR 2N6107 PNP TO220 AF	R190		036-13220-10	RES 0805 220E 1%
Q129		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R191		036-12100-10	RES M/F 0805 10E 1%
Q135		000-10008-48	S) XSTR SMD BCW60 NPN SOT23 SS	R192		036-13680-00	RES M/F 0805 680E 5%
Q200		000-10008-48	S) XSTR SMD BCW60 NPN SOT23 SS	R193		036-16100-10	RES M/F 0805 100K 1%
Q216		000-00031-02	S)XSTR 2SC3102 UHF 60W 6LFL	R194		036-14150-10	RES M/F 0805 1K5 1%
Q217		000-00031-02	S)XSTR 2SC3102 UHF 60W 6LFL	R195		036-12220-00	RES M/F 0805 22E 5%
R100		036-14820-10	RES M/F 0805 8K2 1%	R197		036-12220-00	RES M/F 0805 22E 5%
R101		036-13470-00	RES M/F 0805 470E 5%	R198		036-12220-00	RES M/F 0805 22E 5%
R102		036-14100-10	RES M/F 0805 1K 1%	R200		045-05100-02	RES NTC 10K 2% Metal tagged
R103		036-15100-10	RES M/F 0805 10K 1%	R201		036-13100-10	RES M/F 0805 100E 1%
R104		036-15100-10	RES M/F 0805 10K 1%	R202		036-13560-10	RES M/F 0805 560E 1%
R105		036-14100-10	RES M/F 0805 1K 1%	R203		036-14470-10	RES M/F 0805 4K7 1%
R106		036-14680-10	RES M/F 0805 6K8 1%	R204		036-14470-10	RES M/F 0805 4K7 1%
R107		036-14470-10	RES M/F 0805 4K7 1%	R205		036-13390-10	RES M/F 0805 390E 1%
R109		036-14100-10	RES M/F 0805 1K 1%	R206		036-13390-10	RES M/F 0805 390E 1%
R111		036-14100-10	RES M/F 0805 1K 1%	R207		036-14680-10	RES M/F 0805 6K8 1%
R112		036-15100-10	RES M/F 0805 10K 1%	R208		036-15100-10	RES M/F 0805 10K 1%
R113		036-14100-10	RES M/F 0805 1K 1%	R209		036-14470-10	RES M/F 0805 4K7 1%
R114		036-14470-10	RES M/F 0805 4K7 1%	R210		045-04470-00	RES NTC SMD 4K7 5% 20MW
R115		036-17100-10	RES M/F 0805 1M 1%	R223		036-11330-00	RES M/F 0805 3E3 5%
R116		036-14100-10	RES M/F 0805 1K 1%	R224		036-11330-00	RES M/F 0805 3E3 5%
R117		036-14220-00	RES M/F 0805 2K2 5%	R225		036-11330-00	RES M/F 0805 3E3 5%
R118		036-16100-10	RES M/F 0805 100K 1%	R226		036-03118-10	RES 18R 1W SMD 2512
R119		036-15100-10	RES M/F 0805 10K 1%	R227		036-03270-10	RES 270 OHM 1 WATT 2512 CHIP
R120		036-13680-00	RES M/F 0805 680E 5%	R230		036-03270-10	RES 270 OHM 1 WATT 2512 CHIP
R121		036-17100-10	RES M/F 0805 1M 1%	R231		039-50500-00	RES TERM 50E 50W RFP50-50TCG
R122		036-14220-00	RES M/F 0805 2K2 5%	R235		036-13100-10	RES M/F 0805 100E 1%
R123		036-14100-10	RES M/F 0805 1K 1%	R236		036-13100-10	RES M/F 0805 100E 1%
R124		036-13680-00	RES M/F 0805 680E 5%	R237		036-03100-02	RES 100E 1206 200V 250MW RC01
R125		036-16100-10	RES M/F 0805 100K 1%	R238		036-03100-02	RES 100E 1206 200V 250MW RC01
R126		036-16220-00	RES M/F 0805 220K 5%	R240		039-50500-00	RES TERM 50E 50W RFP50-50TCG
R127		045-04470-00	RES NTC SMD 4K7 5% 20MW	R245		036-03130-10	RES 30E 1W SMD 2512
R128		036-16220-00	RES M/F 0805 220K 5%	R246		036-03130-10	RES 30E 1W SMD 2512
R129		036-15100-10	RES M/F 0805 10K 1%	R247		036-11330-00	RES M/F 0805 3E3 5%
R130		036-16220-00	RES M/F 0805 220K 5%	RV101		042-04500-05	RES PRESET SMD 5K CER 4MM SQ
R131		036-15330-10	RES M/F 0805 33K 1%	RV103		042-05500-05	RES PRESET SMD 50K CER 4MM SQ
R132		036-14100-10	RES M/F 0805 1K 1%	RV105		042-04500-05	RES PRESET SMD 5K CER 4MM SQ
R133		036-15270-10	RES M/F 0805 27K 1%	RV107		042-05500-05	RES PRESET SMD 50K CER 4MM SQ
R134		036-14330-10	RES M/F 0805 3K3 1%	%RV109		044-04200-06	RES PRE MULT 2K 15T PNL MITG
R135		036-16470-00	RES M/F 0805 470K 5%	RV113		042-06500-05	RES PRESET SMD 500K CER 4MM SQ
R136		036-16470-00	RES M/F 0805 470K 5%	RV115		042-05200-05	RES PRESET SMD 20K CER 4MM SQ
				SK101		240-10000-05	CONN SMD SKT 8W 2R M-MATCH
				SK103		240-10000-05	CONN SMD SKT 8W 2R M-MATCH
				SK201		240-02100-44	SKT COAX MINI JACK PCB MT ANG.

T859 Mechanical & Miscellaneous Parts (220-01422-03)

IPN	Legend	Description	IPN	Legend	Description
012-04100-05	1	CAP F/THRU 1N SUPPR FLTR S-MTG	353-00010-24	32	WSHR M4x8MM FLAT
044-04200-07	2	RES POT COVER H-83P	356-00010-01	33	TAG SOLDER 3MM SHORT M6132/3.2
045-05100-02	3	RES NTC 10K 2% METAL TAGGED R200	356-00010-03	34	TAG SOLDER 3MM LONG M614/3.2
070-01001-00	4	D-RANGE 15 WAY COMPL T800	356-00010-05	35	TAG SOLDER 4MM LONG M6144/4.2
201-00030-02		WIRE T/C WIRE 7/0.2 PVC RED Power feed for fan.	357-00010-45	36	CLAMP CABLE 4.8MM P CLIP
201-00050-25		AUTO 154 RED 41/0.3 PVC DC+ from D-range PCB.	360-00010-41	37	BUSH SHORTY BLK
201-00050-26		AUTO 154 BLACK 41/0.3 PVC DC- from D-range PCB.	362-00010-07	38	GASKET SIL INSULATING TO-220
219-02591-01	5	LOOM RIBBON 8 WAY FOR T839PA	362-00010-13	39	BUSH INSULATING 1.1MM TOP HAT
219-02612-00		RG316 CABLE ASSY T869PA BNC to SK201 cable assembly with connectors.	362-00010-33	40	GROMMET LED MTG 3MM
219-02639-00		CABLE ASSEMBLY RG223/U N TO BNC Exciter/PA connecting cable assembly.	399-00010-51		BAG PLASTIC 75X100MM
219-02709-00	6	T858/T859 N-TYPE CONNECTOR SUB	400-00020-30		HEATSHRINK 3MM
220-01422-03	7	PCB T859PA SERIES II	410-00010-43		PKG T296 AMPAC REF 73-46
220-01442-03	41	PCB T858/T859 SII DRNL COUPLER			
240-02100-17	8	SKT COAX BNC PNL JAC CRP RG316			
240-04020-62		SKT 2 W RECEP SHORTING LINK PL110			
240-06010-15	9	BLOCK LATCHING 15W D RANGE			
258-00010-08	10	FAN 12V 119 x 119 x 25 (PAPST)			
302-05204-00	11	BRKT A3M2314 F/THRU MTG T859			
303-23146-00	12	COVER SIDE T869PA			
308-01007-01	13	HANDLE BASE STATION SERIES II			
308-13131-02	14	HEATSINK T859 PA DRILLED DCST			
316-06651-00	15	PNL PA NO INP DRV SER II DBL			
319-01190-01	16	SHIELD WALL HARM. FILTER 869PA			
319-01201-00	17	SHIELD LID HARM. FILTER 869PA			
319-01202-00	18	SHIELD T869PA CONTROL CIRCUIT			
319-30061-00	19	SPACER PLATE T889 WIRELINE			
319-30064-00	20	SPACER HSINK RF MODULE 869PA			
319-30068-00	21	SPACER, T859 PCB HYBRID			
345-00040-16	22	SCRW M3X20MM P/POZ ST BZ			
349-00010-59	23	SCRW 6-32 X 3/8 P/PH T/T ZP			
349-00020-07	24	SCRW 4-40 X 5/16 P/POZ T/T BLK			
349-00020-09	25	SCRW T/T 4-40X3/8 IN P/POZ BLK			
349-00020-36	26	SCREW TT M3X8m PANTORX BLK			
349-00020-43	27	SCRW T/T M4X12MM P/POZ BZ			
349-00020-49	28	SCRW T/T M4X35MM P/POZ BZ			
349-00020-55	29	SCRW M3X8 P/P T/T BLCKZNC CHRMM			
352-00010-29	30	NUT M4 NYLOC HEX			
353-00010-10	31	WSHR M3 FLAT 7MMX0.6MM ST BZ			

replace A4 pages D5.3.23/D5.3.24 with A3 pages D5.3.23/D5.3.24

replace A4 pages D5.3.23/D5.3.24 with A3 pages D5.3.23/D5.3.24

T859 Grid Reference Index (IPN 220-01422-03)

How To Use This Grid Reference Index

The first digit in the PCB layout reference is a "1" or "2", indicating the top or bottom side layout respectively, and the last two characters give the location of the component on that diagram.

The first digit in the circuit diagram reference is the sheet number, and the last two characters give the location of the component on that sheet.

Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit
C100	1:F6	1-B7	C164	1:T3	1-C1	#C273	1:H3	2-L1	L209	1:R5	2-D4
C101	1:E6	1-B6	C166	1:B1	1-G0	C274	1:P3	2-E3	L210	1:R4	2-D4
C102	1:B2	1-C7	C167	1:B1	1-I0	C275	1:F7	2-C9	L211	1:Q6	2-C5
C103	1:B1	1-C6	C168	1:C1	1-I0	C276	1:F7	2-C8	L212	1:R6	2-C4
C104	1:E6	1-D7	C169	1:J1	1-J5	#C277	1:C9	2-Q3	%L213	1:S9	2-B3
C105	1:E5	1-D6	C172	1:F2	1-J0	#C278	1:B8	2-Q3	L235	1:K7	2-K4
C107	1:B4	1-E8	C173	1:E2	1-K0	#C280	1:A7	2-R3	L237	1:M8	2-H4
C108	1:C3	1-F5	C174	1:D2	1-L0	C282	1:D7	2-Q2	L238	1:M9	2-H4
C109	1:E4	1-G6	C175	1:D2	1-M0	#C283	1:D7	2-Q2	L239	1:K6	2-K3
C110	1:E4	1-H6	C176	1:F4	1-M0	C284	1:E9	2-D6	L240	1:H5	2-M3
C111	1:F4	1-I6	C177	1:E3	1-N0	#C285	1:D8	2-P3	L241	1:N5	2-F3
C112	1:B2	1-I6	C178	1:F3	1-N0	C286	1:D7	2-P2	L242	1:K5	2-K3
C113	1:F5	1-J8	C197	1:E5	1-P0	C287	1:F9	2-E6	L243	1:K4	2-K3
C114	1:B3	1-J6	C198	1:C5	1-Q0	C293	1:G7	2-M3	L246	1:M2	2-H1
C115	1:F5	1-K8	C200	1:Q2	2-H7				L247	1:M2	2-H1
C116	1:A3	1-K8	C201	1:Q1	2-H7	D101	1:M5	1-B0	L253	1:F7	2-C9
C117	1:B3	1-L8	C202	1:F2	2-K7	D105	1:C4	1-F8	#L254	1:D9	2-P3
C119	1:C4	1-O7	C203	1:E2	2-K7	D105	1:C4	1-F8	#L255	1:C8	2-Q3
C120	1:D6	1-O7	C204	1:B2	2-L7	D110	1:F5	1-G8	#L256	1:A8	2-R3
C121	1:D5	1-O8	C205	1:E3	2-M7	D110	1:F5	1-G8	L257	1:E9	2-D7
C122	1:D5	1-O8	C206	1:F3	2-M7	D112	1:V9	1-I4	#L258	1:D7	2-P2
C123	1:B5	1-P9	C207	1:F3	2-N7	D114	1:V8	1-I4	L259	1:D7	2-Q2
C124	1:B5	1-P9	C208	1:B6	2-P7	D115	1:E5	1-F5	L260	1:C7	2-Q2
C125	1:C5	1-Q7	C209	1:C6	2-Q7	D115	1:E5	1-F5			
C126	1:B5	1-Q8	C210	1:D6	2-Q7	D120	1:C3	1-F5	LINK200	1:N5	2-M0
C127	1:B6	1-Q8	C211	1:C6	2-Q7	D120	1:C3	1-G4			
C128	1:C6	1-Q7	C214	1:D3	1-Q0	D190	1:V9	1-J4	P105	1:U5	1-B1
C129	1:B5	1-R8	C215	1:E3	1-R0	D205	1:G7	2-C8	P110	1:U3	1-B0
C130	1:B5	1-R8	C218	1:Q5	2-C5	D206	1:E9	2-D7	P130	1:A6	1-U8
C131	1:A5	1-S8	C219	1:R4	2-B5				P200	1:F7	2-N3
C132	1:B5	1-S9	C220	1:R5	2-C4	IC100	1:E5	1-D7	P201	1:E9	2-P3
C133	1:A5	1-T8	C221	1:R4	2-C3	IC100	1:E5	1-I8	P210	1:M7	2-G4
%C134	1:A6	1-T8	C222	1:R4	2-E3	IC100	1:E5	1-D7	P212	1:M3	2-G1
C136	1:B2	1-M4	C223	1:Q4	2-E4	IC100	1:E5	1-O0	P214	1:M7	2-J4
C137	1:D3	1-M3	C224	1:Q4	2-E5	IC100	1:E5	1-H6	P216	1:M3	2-J1
C138	1:D3	1-M3	C225	1:Q6	2-C4	IC105	1:D5	1-O7	P218	1:K7	2-J5
C139	1:B4	1-N6	C226	1:R6	2-C3	IC105	1:D5	1-S0	P220	1:K3	2-J2
C140	1:F1	1-N2	C227	1:S8	2-A3	IC105	1:D5	1-P0	P222	1:K7	2-K5
C141	1:C3	1-O4	C228	1:R8	2-B3	IC105	1:D5	1-I2	P224	1:K3	2-K2
C142	1:D3	1-O4	#C247	1:H7	2-L4	IC105	1:D5	1-P8	P226	1:K7	2-L5
C143	1:E1	1-O2	C249	1:N7	2-G4	IC110	1:E3	1-T0	P228	1:K3	2-L2
C144	1:F1	1-O2	C250	1:H7	2-L4	IC110	1:E3	1-N0	P250	1:E7	2-N0
C145	1:D1	1-O3	#C252	1:K7	2-K4	IC110	1:E3	1-M3	P260	1:G9	2-P0
C146	1:D2	1-O4	#C253	1:K7	2-K4	IC130	1:B1	1-H0	P270	1:D7	2-Q2
C147	1:B4	1-P6	C254	1:J7	2-L4	IC140	1:E2	1-K0			
C148	1:E2	1-P3	#C256	1:M7	2-H4	IC200	1:E3	1-U0	PL101	2:S4	1-B0
C149	1:E1	1-P2	#C257	1:M7	2-J4	IC200	1:E3	1-Q0	PL110	1:C2	
C150	1:D2	1-P4	C258	1:K6	2-L3	IC200	1:E3	2-M8			
C151	1:B4	1-P5	C259	1:L5	2-K3	#IC210	1:S5	2-C3	Q100	1:F4	1-I6
C152	1:E2	1-Q2	C260	1:L6	2-J3				Q101	1:B3	1-J6
C153	1:F2	1-Q4	C261	1:K4	2-L3	%L100	1:A5	1-T8	Q102	1:F5	1-J8
C154	1:F2	1-Q2	C262	1:H3	2-L2	L120	1:F2	1-Q2	Q103	1:A3	1-K8
C156	1:D4	1-G1	C263	1:J3	2-L1	L161	1:U4	1-B1	Q110	1:B5	1-Q9
C157	1:D4	1-H1	#C264	1:K3	2-K1	L162	1:T3	1-C1	Q111	1:B6	1-Q8
C158	1:D4	1-I1	#C265	1:K3	2-K1	L200	1:Q1	2-H8	Q112	1:C6	1-Q7
C159	1:D3	1-K1	C268	1:N3	2-G1	L201	1:F2	2-K8	Q113	1:B5	1-R8
C161	1:T3	1-B1	#C269	1:M3	2-H1	L202	1:B6	2-P7	Q114	1:A5	1-S8
C162	1:U4	1-B1	#C270	1:M3	2-J1	L203	1:D6	2-Q7	Q120	1:B4	1-N6
C163	1:U3	1-C1	C272	1:L6	2-J3	L208	1:Q5	2-D5	Q121	1:C4	1-N4

<u>Device</u>	<u>PCB</u>	<u>Circuit</u>	<u>Device</u>	<u>PCB</u>	<u>Circuit</u>	<u>Device</u>	<u>PCB</u>	<u>Circuit</u>	<u>Device</u>	<u>PCB</u>	<u>Circuit</u>
Q122	1:F1	1-O2	R163	1:E2	1-P3						
Q123	1:B4	1-O6	R164	1:E1	1-P2						
Q124	1:F1	1-O3	R165	1:E1	1-P2						
Q125	1:D3	1-O4	R166	1:B4	1-P6						
Q126	1:D2	1-P4	R167	1:B4	1-P5						
Q127	1:B4	1-P5	R168	1:E1	1-P2						
Q128	1:D2	1-P3	R169	1:D2	1-P4						
Q129	1:B3	1-Q6	R170	1:E2	1-P2						
Q135	1:C4	1-K2	R171	1:F1	1-P2						
Q200	1:F3	2-P7	R172	1:B4	1-P6						
Q216	1:L7	2-J4	R173	1:D2	1-Q4						
Q217	1:L3	2-J1	%R174	1:F2	1-Q6						
			R175	1:B3	1-Q6						
R100	1:F5	1-C7	R176	1:B3	1-Q6						
R101	1:E5	1-C6	R177	1:D4	1-H2						
R102	1:D1	1-C7	R178	1:D4	1-H2						
R103	1:F6	1-D7	R179	1:D4	1-H1						
R104	1:E5	1-D6	R180	1:D4	1-I1						
R105	1:B4	1-E8	R181	1:D4	1-I2						
R106	1:E4	1-F7	R182	1:D5	1-J2						
R107	1:E4	1-F6	R183	1:C5	1-J2						
%R108	1:E6	1-F6	R184	1:C4	1-J1						
R109	1:F5	1-F8	R185	1:C3	1-K2						
%R110	1:F5	1-F8	R186	1:C3	1-K2						
R111	1:C3	1-F5	R187	1:C3	1-K2						
R112	1:E4	1-G6	R188	1:D3	1-L1						
R113	1:B3	1-G5	R189	1:B1	1-H0						
R114	1:E4	1-G6	R190	1:B1	1-H0						
R115	1:E4	1-H6	R191	1:C1	1-I0						
R116	1:E4	1-H5	R192	1:V9	1-J5						
R117	1:E4	1-H6	R193	1:D2	1-L0						
R118	1:F4	1-H8	R194	1:E2	1-L0						
R119	1:E5	1-H8	R195	1:E3	1-N0						
R120	1:V7	1-I5	R197	1:E5	1-O0						
R121	1:F5	1-I8	R198	1:C5	1-P0						
R122	1:F4	1-I8	R200	1:T2	2-H7						
R123	1:F5	1-I8	R201	1:D3	2-L8						
R124	1:V8	1-I5	R202	1:D3	2-L6						
R125	1:C5	1-N7	R203	1:D3	2-L8						
R126	1:E6	1-N7	R204	1:D3	2-L8						
R127	1:C5	1-N7	R205	1:F3	2-L7						
R128	1:D6	1-N7	R206	1:F3	2-L7						
R129	1:B5	1-O9	R207	1:F3	2-M7						
R130	1:D5	1-O8	R208	1:F3	2-N7						
R131	1:D5	1-O8	R209	1:F3	2-N7						
R132	1:D5	1-O8	R210	1:B6	2-P7						
R133	1:C4	1-O7	R223	1:R5	2-C4						
R134	1:B5	1-O9	R224	1:Q4	2-E4						
R135	1:C5	1-P7	R225	1:Q6	2-C4						
R136	1:D5	1-P8	R226	1:R7	2-B3						
R137	1:C5	1-P7	R227	1:R8	2-B2						
R138	1:D5	1-P8	R230	1:R7	2-B2						
R139	1:C6	1-P7	R231	1:N9	2-F3						
R140	1:B5	1-Q8	R235	1:E7	2-E8						
R141	1:B6	1-Q8	R236	1:G9	2-C7						
R142	1:B5	1-Q8	R237	1:D6	2-R2						
R143	1:B5	1-R9	R238	1:D6	2-R2						
R144	1:A5	1-R9	R240	1:G1	2-M3						
%R145	1:A5	1-T8	R245	1:K6	2-L3						
R146	1:V7	1-K4	R246	1:K4	2-L3						
R147	1:V7	1-K4	R247	1:L6	2-K3						
R148	1:V7	1-K4									
R149	1:E4	1-M4	RV101	1:C4	1-H8						
R150	1:D3	1-M2	RV103	1:C4	1-F8						
R151	1:E4	1-M4	RV105	1:C3	1-G6						
R152	1:D3	1-N4	RV107	1:C2	1-F5						
R153	1:E4	1-N3	%RV109	1:V6	1-K5						
R154	1:E4	1-N2	%RV111	1:V7	1-K4						
R155	1:B4	1-O6	RV113	1:C3	1-K2						
R156	1:C4	1-O4	RV115	1:C2	1-M0						
R157	1:D3	1-O4									
R158	1:D4	1-O4	SK101	1:T4	1-C0						
R159	1:B4	1-O6	SK103	1:A4	1-C0						
R160	1:E1	1-O2	SK201	1:R9	2-A3						
R161	1:C4	1-O6									
R162	1:D2	1-O4									