TRANSISTOR, DIODE, AND IC FUNCTIONS

RULE PART NUMBER: 2.983 (d)6)

DL-3422

Designator	Part Number	Function	JEDEC or Vendor Type
CR561	523-1504-001	Antenna switch	MMBV3401
CR562	523-1504-001	Antenna switch	MMBV3401
CR591	523-1504-016	Directional coupler	MMBD701LT
CR592	523-1504-016	Directional coupler	MMBD701LT
CR851	523-1504-001	Pin shift diode	MMBV3401
CR852	523-5005-023	Rectifier	MMBV609
CR853	523-5005-023	Rectifier	MMBV609
CR861	523-5005-022	Varactor	BB535E7908
CR862	523-5005-022	Varactor	BB535E7908
CR901	523-5005-022	Varactor	BB535E7908
CR902	523-1504-023	Rectifier	BAV99LT1
Q101	576-0013-046	Tx enable	MUN5213T1
Q102	576-0013-032	Tx enable	MUN2114T1
Q121	576-0013-046	Rx enable	MUN5213T1
Q122	576-0013-046	Rx enable	MUN5213T1
Q123	576-0013-032	Rx enable	MUN2114T1
Q124	576-0006-027	Soft key up control	PZT2222AT1
Q131	576-0013-046	5 volt shutdown	MUN5213T1
Q171	576-0013-046	Pin shift	MUN5213T1
Q172	576-0013-032	Pin shift	MUN2114T1
Q501	576-0003-640	RF buffer	MSA-2111
Q511	576-0003-636	RF driver	NE85633
Q531	576-0006-027	Power control	PZT2222AT1
Q801	576-0013-701	Constant voltage source	MSD1819A-RT1
Q841	576-0013-046	Pin shift	MUN5213T1
Q842	576-0013-032	Pin shift	MUN2114T1
Q871	576-0003-651	VCO buffer	NE85619-T1
Q872	576-0003-651	Oscillator	NE85619-T1
Q881	576-0013-700	Bias regulator	MSB1218A-AT1
Q882	576-0003-636	Amplifier	NE85633
Q901	576-0013-701	Capacitance multiplier	MSD1819A-RT1
Q902	576-0003-634	Amplifier	MMBT918LT1
U111A	544-2020-020	Soft key up control	LMC660AMI
U111B	544-2020-020	Soft key up control	LMC660AMI
U111C	544-2020-020	Power control	LMC660AMI
U111D	544-2020-020	Soft key up control	LMC660AMI
U131	544-2603-093	Voltage regulator	TK11900MTL
U141	544-2603-093	Voltage regulator	TK11900MTL
U531	544-4001-062	RF power module	M57732
U581A	544-2019-017	V-fwd amp	MC33172DT
U581B	544-2019-017	V-rev amp	MC33172DT
U811	544-3954-027	Synthesizer	SA7025DK-T

TRANSISTOR, DIODE, AND IC FUNCTIONS (continued)

RULE PART NUMBER: 2.983 (d)6)

HNET MODEM

Reference designator	Function	Type
CZ1	Transient Voltage Suppressor 5.6v, 0805	VC080505A150
CZ2	Transient Voltage Suppressor 5.6v, 0805	VC080505A150
CZ3	Transient Voltage Suppressor 14v, 0805	VC080514A300
CZ6	Transient Voltage Suppressor 14v, 0805	VC080514A300
CZ7	Transient Voltage Suppressor 14v, 0805	VC080514A300
CZ8	Transient Voltage Suppressor 14v, 0805	VC080514A300
CZ9	Transient Voltage Suppressor 14v, 0805	VC080514A300
CZ10	Transient Voltage Suppressor 14v, 0805	VC080514A300
CZ11	Transient Voltage Suppressor 14v, 0805	VC080514A300
CZ12	Transient Voltage Suppressor 14v, 0805	VC080514A300
CZ4	Transient Voltage Suppressor 5.6v, 0805	VC080505A150
CZ5	Transient Voltage Suppressor 5.6v, 0805	VC080505A150
D1	reverse power supply protection	1N4001
D2	reference setting	BAV99LT1
D3	TTL input protection	BAV99LT1
D4	TTL input protection	BAV99LT1
D5	TTL input protection	BAV99LT1
D6	negative peak detector	MBD301LT1
D7	positive peak detector	MBD301LT1
D8	DIODE,ZENER 4.7v	BZX84C4V7LT1
DS1	Led, Narrow Beam, Yellow	HLMP-6400-010
DS2	Led, Narrow Beam, Red	HLMP-6000-010
DS3	LED, Narrow Beam, Green	HLMP-6500-010
Q1	LED Switch	MMBT3904LT1
Q2	LED Switch	MMBT3904LT1
Q3	LED Switch	MMBT3904LT1
Q4	phase peak shape formatter	MMBT3904LT1
Q5	phase peak shape formatter	MMBT3904LT1
U1	RS-232 Driver/Receiver 5v	MC145407DW
U2	Data Set (sync/async) Interface	MC145428DW
U4	Undervoltage Sensing Circuit	MC33064D
U5	Microprocessor ,QFP-80	68HC711K4FU
U6	CPLD 64 Macrocell, Digital Modem	PZ5064-I12A44
U7	Dual , Op Amp	LMC6484AIM
U8	Quad, Op Amp	TLC2274I
U9	Digital Potentiometer	AD8402AR50
U10	Quad, Op Amp	TLC2274I
U11	Analog Multiplexers/Demultiplexers	MC74HC4053D
U12	Filter, Linear Phase Low Pass	LTC1069-7
U13	Regulator, Micropower Voltage	LP2951CD
U14	Regulator, Micropower Voltage	LP2951CD

TRANSMITTER TUNE UP PROCEDURE

RULE PART NUMBER: 2.983 (d)(9)

TRANSMITTER TUNE UP PROCEDURE

1. Connect the transceiver to be aligned to a DC power source. A DC current meter capable of measuring at least 2.5 Amps should be connect in line with the DC source. Connect the output of the transceiver through a watt meter and into a 50 ohm dummy load.

2. Load the synthesizer with the center channel frequency.

3. Key the transmitter and make certain that the supply voltage at the RF board is 13.3 VDC. (Do not transmit for extended periods of time.)

4. Adjust C525 clockwise for 5.0 Watts of output power.

5. Check the power levels on the low and the high frequencies for 5.0 Watts +/- 1 Watt.