

FUNCTION OF RF SEMICONDUCTORS AND OTHER ACTIVE DEVICES

SCHEMATIC KEY	PART NUMBER	CIRCUIT APPLICATION	OPERATING FREQUENCY	INDUSTRY EQUIVALENT
CR1	48-80154K03	CLIPPER	450-470 MHz	MMBD353
CR51	48-80154K03	CLIPPER	44.85 MHz	MMBD353
CR101	48-80973Z02	ANTENNA PIN SWITCH	450-470 MHz	A60055T535
CR102	48-80973Z02	ANTENNA PIN SWITCH	450-470 MHz	A60055T535
CR201	48-13833C07	RECTIFIER	1.05 MHz	MMBD7000
CR202	48-13833C07	RECTIFIER	1.05 MHz	MMBD7000
CR203	48-02245J22	REF OSC FREQ CONTROL	16.8 MHz	1T363
CR251	48-62824C01	TX VCO FREQ CONTROL	450-470 MHz	1SV229
CR252	48-62824C01	TX VCO MODULATION	450-470 MHz	1SV229
CR253	48-62824C01	RX VCO FREQ CONTROL	405.15-425.15 MHz	1SV229
CR301	48-80107R01	REVERSE POLARITY PROTECT	DC	BYD17-D
CR401	48-80939T01	SWITCH	5 KHz	1N15711
CR402	48-13833C07	ESD PROTECTION	DC	MMBD7000
CR403	48-80939T01	DC SWITCH	DC	1N15711
CR404	48-13833C07	OVERVOLTAGE PROTECTION	DC	MMBD7000
CR470	48-13833C07	RECTIFIER	AUDIO	MMBD7000
DS401	48-05729G49	LED INDICATOR RED/GREEN	DC	BRPY1204W-TR
Q1	48-13827A07	RF AMPLIFIER	450-470 MHz	MMBR941
Q51	48-13827A07	I-F AMPLIFIER	44.85 MHz	MMBR941
Q52	48-13827A07	SECOND LOCAL OSCILLATOR	44.395 MHz	MMBR941
Q53	48-80214G02	DC SWITCH	DC	MMBT3904
Q54	48-80214G02	DC SWITCH	DC	MMBT3904
Q101	48-80173R01	TX BUFFER AMPLIFIER	450-470 MHz	MMBR951L
Q102	48-80173R01	GAIN-CONTROLLED PREDRIVER	450-470 MHz	MMBR951L
Q103	48-80502D01	RF PA DRIVER	450-470 MHz	BLT50
Q104	48-02245J31	RF PA FINAL AMPLIFIER	450-470 MHz	MRF5007
Q150	48-80214G02	DC AMPLIFIER	DC	MMBT3904
Q151	48-80141L03	POWER CONTROL PASS DEVICE	DC	BCW68G
Q152	48-80141L03	DC SWITCH	DC	BCW68G
Q251	48-13827A07	RX LO BUFFER AMPLIFIER	405.15-425.15 MHz	MMBR941
Q401	48-80214G02	CLOCK FREQUENCY SHIFT	7.9 MHz	MMBT3904
Q453	48-80141L03	DC SWITCH	DC	BCW68G
Q490	48-80947V01	AUDIO GAIN SELECT	AUDIO	DTC144W
Q491	48-80494U01	DC SWITCH	DC	DTA144K

FUNCTION OF RF SEMICONDUCTORS AND OTHER ACTIVE DEVICES (cont'd)

SCHEMATIC KEY	PART NUMBER	CIRCUIT APPLICATION	OPERATING FREQUENCY	INDUSTRY EQUIVALENT
U41	48-80174R03	DOUBLE BALANCED MIXER	44.85-470 MHz	SMS3992
U51	51-80605E02	RECEIVER SYSTEM	44.85 MHz/455 KHz	CUSTOM
U52	51-09522E13	RF SWITCH	455 kHz	TC7S66FU
U53	51-09522E13	RF SWITCH	455 kHz	TC7S66FU
U54	51-09522E13	RF SWITCH	455 kHz	TC7S66FU
U55	51-09522E13	RF SWITCH	455 kHz	TC7S66FU
U150	51-80932W01	TX POWER CONTROL DC AMP	DC	LM2904
U151	51-80159R01	DC AMP/DC SWITCH	DC	IMX1
U201	51-05457W72	SYNTHESIZER	16.8-470 MHz	CUSTOM
U251	51-05414S84	VCO/BUFFER	405.15-470 MHz	CUSTOM
U301	51-80633C01	5V REGULATOR	DC	TK11950
U302	51-05469E65	5V REGULATOR	DC	LP2951C
U303	51-80159R03	DC SWITCH	DC	IMT1A
U401	51-80489U01	MICROCOMPUTER	7.9 MHz	MC68HC11KA4
U402	51-80159R01	DC SWITCH	DC	IMX1
U430	51-13811A35	AUDIO COMPANDER	AUDIO	MC33111
U451	51-80604E01	TX/RX AUDIO FILTER	2.1 MHz	CUSTOM
U452	51-80932W01	AUDIO FILTER/DATA AMP	DC	LM2904
U453	51-80159R03	DC SWITCH	DC	IMT1A
U470	51-02198J23	AUDIO/DATA COMPARATOR	AUDIO/DC	LM2903
U481	51-05469E51	AUDIO POWER AMP	AUDIO	MC34119
U490	51-62852A09	AUDIO LIMITER	AUDIO	LMC7101
VR401	48-80140L15	ESD PROTECTION	AUDIO	MMBZ5240
VR402	48-80140L15	ESD PROTECTION	5 KHZ	MMBZ5240
VR403	48-13830A28	OVERVOLTAGE PROTECT	DC	MMBZ5245