

**SUNSTAR商斯达实业集团**是集研发、生产、工程、销售、代理经销、技术咨询、信息服务等为一体的高科技企业，是专业高科技电子产品生产厂家，是具有 10 多年历史的专业电子元器件供应商，是中国最早和最大的仓储式连锁规模经营大型综合电子零部件代理分销商之一，是一家专业代理和分销世界各大品牌IC芯片和电子元器件的连锁经营综合性国际公司。在香港、北京、深圳、上海、西安、成都等全国主要电子市场设有直属分公司和产品展示展销窗口门市部专卖店及代理分销商，已在全国范围内建成强大统一的供货和代理分销网络。我们专业代理经销、开发生产电子元器件、集成电路、传感器、微波光电元器件、工控机/DOC/DOM电子盘、专用电路、单片机开发、MCU/DSP/ARM/FPGA软件硬件、二极管、三极管、模块等，是您可靠的一站式现货配套供应商、方案提供商、部件功能模块开发配套商。专业以现代信息产业（计算机、通讯及传感器）三大支柱之一的传感器为主营业务，专业经营各类传感器的代理、销售生产、网络信息、科技图书资料及配套产品设计、工程开发。我们的专业网站——**中国传感器科技信息网（全球传感器数据库）www.SENSOR-IC.COM** 服务于全球高科技生产商及贸易商，为企业科技产品开发提供技术交流平台。欢迎各厂商互通有无、交换信息、交换链接、发布寻求代理信息。欢迎国外高科技传感器、变送器、执行器、自动控制产品厂商介绍产品到 中国，共同开拓市场。本网站是关于各种传感器-变送器-仪器仪表及工业自动化大型专业网站，深入到工业控制、系统工程计 测量、自动化、安防报警、消费电子等众多领域，把最新的传感器-变送器-仪器仪表买卖信息，最新技术供求，最新采购商，行业动态，发展方向，最新的技术应用和市场资讯及时的传递给广大科技开发、科学研究、产品设计人员。本网站已成功为石油、化工、电力、医药、生物、航空、航天、国防、能源、冶金、电子、工业、农业、交通、汽车、矿山、煤炭、纺织、信息、通信、IT、安防、环保、印刷、科研、气象、仪器仪表等领域从事科学研究、产品设计、开发、生产制造的科技人员、管理人员、和采购人员提供满意服务。 **我公司专业生产、代理、经销、销售各种传感器、变送器、敏感元器件、开关、执行器、仪器仪表、自动化控制系统：** 专业从事设计、生产、销售各种传感器、变送器、各种测控仪表、热工仪表、现场控制器、计算机控制系统、数据采集系统、各类环境监控系统、专用控制系统应用软件以及嵌入式系统开发及应用等工作。如热敏电阻、压敏电阻、温度传感器、温度变送器、湿度传感器、湿度变送器、气体传感器、气体变送器、压力传感器、压力变送、称重传感器、物（液）位传感器、物（液）位变送器、流量传感器、流量变送器、电流（压）传感器、溶氧传感器、霍尔传感器、图像传感器、超声波传感器、位移传感器、速度传感器、加速度传感器、扭距传感器、红外传感器、紫外传感器、火焰传感器、激光传感器、振动传感器、轴角传感器、光电传感器、接近传感器、干簧管传感器、继电器传感器、微型电泵、磁敏（阻）传感器、压力开关、接近开关、光电开关、色标传感器、光纤传感器、齿轮测速传感器、时间继电器、计数器、计米器、温控仪、固态继电器、调压模块、电磁铁、电压表、电流表等特殊传感器。同时承接传感器应用电路、产品设计和自动化工程项目。

欢迎索取免费详细资料、设计指南和光盘；产品凡多，未能尽录，欢迎来电查询。

更多产品请看本公司产品专用销售网站：

商斯达中国传感器科技信息网：<http://www.sensor-ic.com/>

商斯达工控安防网：<http://www.pc-ps.net/>

商斯达电子元器件网：<http://www.sunstare.com/>

商斯达微波光电产品网：[HTTP://www.rfoe.net/](http://www.rfoe.net/)

商斯达消费电子产品网：<http://www.icasic.com/>

商斯达军工产品网：<http://www.junpinic.com/>

商斯达实业科技产品网：<http://www.sunstars.cn/>传感器销售热线：

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SUPPLIER	CODE	SUPPLIER STRENGTHS	FRANCHISE	BI-POLAR	MOS FET	LDMOS	FREQUENCY	WEB SITE	TYPICAL MARKETS/APPLICATION
Ericsson	EC	LDMOS	Worldwide, except China, Japan	X		X	1 MHz - 2.2 GHz	www.ericsson.com/rfpower	Telecommunications & Broadcast
GHZ	GZ	Bipolar, custom applications	Worldwide	X		TBD	1 MHz - 3 GHz	www.ghz.com	Avionics, Broadcast, Defense, Radar
M/A COM	MW	RF MOSFETs	North America, Canada, Japan	X	X		30 MHz - 3.5 GHz	www.macom.com	Radar, Avionics
Microsemi	MY	Bipolar supplier	Worldwide	X	X	TBD	2 MHz - 4 GHz	www.microsemi.com	Telecommunications, Industrial, Military, Avionics
Motorola	MO	Market Leader	Worldwide	X	X	X	1 MHz - 2.4 GHz	www.motorola.com/sps/rf	Base Stations, Telecommunications, Broadcast, Avionics
Semelab	SB	Drop in for Polyfet & Point 9	Worldwide		X	TBD	1 MHz - 2 GHz	www.semelab.co.uk	Base Stations, DAB, Medical Electronics, EMC Test Equip
Stanford	SF	LDMOS	Worldwide			X	1 GHz - 2.4 GHz	www.stanfordmicro.com	Base Stations
ST	SM	Developing plastic LDMOS	North America, Canada, Europe	X	X	X	30 MHz - 3.0 GHz	www.st.com	Broadcast, Radar, Avionics, Telecommunications

The Selection Guide is organized by application. The applications are:

HF: 1 - 30 MHz

VHF: 30 - 300 MHz

UHF: 300 - 1000 MHz

VHF-UHF TV LINEAR: VHF TV 55-88 MHz, 174-225 MHz UHF TV: 470 - 860MHz

GENERAL PURPOSE

CELLULAR, GSM, PAGING: Cellular 840 - 880 MHz GSM: 925 - 960 MHz, Paging: 928-932 MHz

PDC, DAB, SATCOM, TELEMETRY

PCS, DCS, WLL, GSM 1800, GSM 1900: PCS - 1800-1990 MHz

3G, WCDMA, UMTS, CDMA2000 - 2100-2200 MHz

AVIONICS-DME, IFF - 960-1215 MHz

AVIONICS-JTIDS, TACAN, MODE-S - 960-1215 MHz

AVIONICS- S BAND - 2700-3500 MHz

CATV - 50-1000 MHz

AMPLIFIER MODULES

**HF  
TRANSISTORS**

**BIPOLARS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
GZ	S175-50	2-30	175	17	50		65	C	
GZ	S200-50	2-30	200	12	50		60	C	
MY	MS1227	2-30	20	15	12.5	-30		C	Tested Class C
MY	MS1001	2-30	75	13	12.5	-32		C	Tested Class C
MY	MS1051	2-30	100	11	12.5	-30		AB	
MY	MS1226	2-30	50	16	28	-28		C	Tested Class C
MY	MS1000	2-30	125	15	28	-30		C	Tested Class C
MY	MS1077	2-30	130	12	28	-30		AB	
MY	MS1078	2-30	220	12	28	-30		AB	
MY	MS1005	2-30	200	16	40	-30		AB	
MY	MS1006	2-30	75	14	50	-30		AB	
MY	MS1007	2-30	150	14	50	-30		AB	
MY	MS1079	2-30	220	13	50	-30		AB	
MY	MS1004	2-30	250	13.5	50	-30		AB	
SM	SD1405	2-30	75	13	12.5	-32		AB	Tested Class C
SM	SD1487	2-30	100	11	12.5	-30		AB	
SM	SD1407	2-30	125	15	28	-30		AB	Tested Class C
SM	SD1729/TH416	2-30	130	12	28	-30	37	AB	Tested Class C
SM	SD1730/TH560	2-30	220	12	28	-30	40	AB	
SM	SD1411	2-30	200	16	40	-30		AB	
SM	SD1733/TH513	2-30	75	14	50	-30	37	AB	
SM	SD1726/THA15	2-30	150	14	50	-30	37	AB	
SM	SD1727/THX15	2-30	150	14	50	-30	37	AB	
SM	SD1731/TH562	2-30	220	13	50	-30	40	AB	
SM	SD1731-14	2-30	250	12	50	-30		AB	
SM	SD1728/TH430	2-30	250	14.5	50	-30	40	AB	

**MOSFETS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MO	MRF154	2-100	600	17	50	-25	45	AB	unmatched
MO	MRF157	2-100	600	20	50	-25	45	AB	unmatched
MO	MRF150	2-150	150	17	50	-32		AB	unmatched
MO	MRF141G	2-175	300	13	28		55	AB	unmatched
MO	MRF151	2-175	150	13	50		45	AB	unmatched
MO	MRF151G	2-175	300	16	50		55	AB	unmatched
MO	MRF148A	2-225	30	18	50	-35	55	AB	unmatched
MO	MRF134	30-225	5	14	28		55	AB	unmatched
MO	MRF136	30-225	15	16	28		60	AB	unmatched
MO	MRF171A	30-225	45	19.5	28	-32	65	AB	unmatched
MO	MRF173	30-225	80	13	28		65	AB	unmatched
MO	MRF174	30-225	125	11.8	28		60	AB	unmatched

**VHF  
TRANSISTORS  
(FM Broadcast, Mobile Radio, etc)**

**LDMOS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	EFF %	Class	Comment
MO	MRF1511T1	135-175	8	11.5	7.5	55	AB	T Suffix - Tape & Reel - reel of 1000 (unmatched)
MO	MRF1550T1	135-175	50	10	12.5	50	AB	T Suffix - Tape & Reel - reel of 1000
MO	MRF1535T1	135-520	35	10.5	12.5	55	AB	T Suffix - Tape & Reel - reel of 1000
MO	MRF1513T1	400-520	3	11	12.5	55	AB	T Suffix - Tape & Reel - reel of 1000 (unmatched)
MO	MRF1518T1	400-520	8	11	12.5	55	AB	T Suffix - Tape & Reel - reel of 1000 (unmatched)
MO	MRF1517T1	430-520	8	11	7.5	55	AB	T Suffix - Tape & Reel - reel of 1000 (unmatched)

**BIPOLARS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	EFF %	Class	Comment
MY	MS1403	136-175	1.4	11.5	7.5		C	
MY	MS1401	136-175	2.5	11	7.5		C	
MY	MS1504	136-175	30	10	13.6		C	
MY	MS1506	136-175	40	9	13.6		C	
MY	SD1012	136-175	4	12	12.5	50	C	
MY	SD1012-03	136-175	6	9	12.5	50	C	
MY	SD1272	136-175	25	9.2	12.5		C	
MY	SD1018	136-175	40	4.5	12.5	70	C	
MY	SD1251	136-175	45	6.5	12.5	50	C	
MY	MS1003	136-175	100	6	12.5		C	
MY	SD1070	136-175	13.5	5.8	28	70	C	
MY	SD1224	136-175	40	7.6	28	60	C	
MY	SD1009	136-175	125	9.2	28	55	C	
SM	SD1446	27-88	70	10	12.5	55	C	
SM	SD1405	27-88	50	12	12.5		C	
SM	SD1726/THA15	27-88	150	9	50		C	
SM	SD1727/THX15	27-88	150	9	50		C	
SM	SD1728/TH430	27-88	250	10	50		C	

**BIPOLARS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
SM	SD1457	88-108	75	10	28			
SM	SD1460	88-108	150	9.2	28			
SM	SD1274	136-175	30	10	13.6		C	
SM	SD1274-01	136-175	30	10	13.6		C	
SM	SD1275	136-175	40	9	13.6		C	
SM	SD1275-01	136-175	40	9	13.6		C	
SM	SD1477	136-175	100	6	12.5		C	
SM	SD1480	136-175	125	9.2	28	55	C	
MO	MHL8115	40-1000	1	17.5	15		A	Wideband Linear Amplifier Module
MO	MHL8118	40-1000	1	17.5	28		A	Wideband Linear Amplifier Module

**MOSFETS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MO	MRF154	2-100	600	17	50	45	AB	unmatched
MO	MRF157	2-100	600	20	50	45	AB	unmatched
MO	MRF150	2-150	150	17	50		AB	unmatched
MO	MRF141	2-175	150	10	28	55	AB	unmatched
MO	MRF141G	2-175	300	13	28	55	AB	unmatched
MO	MRF151	2-175	150	13	50	45	AB	unmatched
MO	MRF151G	2-175	300	16	50	55	AB	unmatched
MO	MRF148A	2-225	30	18	50	55	AB	unmatched
MO	MRF134	30-225	5	14	28	55	AB	unmatched
MO	MRF136	30-225	15	16	28	60	AB	unmatched
MO	MRF171A	30-225	45	19.5	28	65	AB	unmatched
MO	MRF173	30-225	80	13	28	65	AB	unmatched
MO	MRF174	30-225	125	11.8	28	60	AB	unmatched

**MOSFETS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MO	MRF158	30-512	2	17.5	28	52	AB	unmatched
MO	MRF160	30-512	4	17	28	55	AB	unmatched
MO	MRF166C	30-512	20	16	28	55	AB	unmatched
MO	MRF166W	30-512	40	16	28	55	AB	unmatched
MO	MRF177	100-400	100	12	28	60	AB	unmatched
MO	MRF275L	150-512	100	8.8	28	55	AB	unmatched
MO	MRF275G	150-512	150	11.2	28	55	AB	unmatched
MW	DU1215S	2-175	15	9.5	12	60	AB	Not recommended for new designs
MW	DU1230S	2-175	30	10	12	60	AB	Not recommended for new designs
MW	DU1260T	2-175	60	8	12	60	AB	
MW	DU2805S	2-175	5	11	28	55	AB	Not recommended for new designs
MW	DU2810S	2-175	10	13	28	55	AB	
MW	DU2820S	2-175	20	13	28	60	AB	
MW	DU2840S	2-175	40	13	28	60	AB	
MW	DU2840V	2-175	40	13	28	60	AB	
MW	DU2860U	2-175	60	13	28	60	AB	
MW	DU2860T	2-175	60	13	28	60	AB	
MW	DU2880T	2-175	80	13	28	60	AB	
MW	DU2880U	2-175	80	13	28	60	AB	
MW	DU2880V	2-175	80	13	28	60	AB	
MW	DU28120T	2-175	120	13	28	60	AB	Not recommended for new designs
MW	DU28120V	2-175	120	13	28	60	AB	Not recommended for new designs
MW	DU28200M	2-175	200	13	28	55	AB	
MW	UF2801K1	100-500	1	10	28	45	AB	
MW	UF2805B	100-500	5	10	28	50	AB	
MW	UF2810P	100-500	10	10	28	50	AB	
MW	UF2815B	100-500	15	10	28	50	AB	
MW	UF2820P	100-500	20	10	28	50	AB	
MW	UF2820R	100-500	20	10	28	50	AB	
MW	UF2840G	100-500	40	10	28	50	AB	
MW	UF2840P	100-500	40	10	28	50	AB	



**MOSFETS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MW	UF28100H	100-500	100	10	28	50	AB	
MW	UF28100M	100-500	100	10	28	50	AB	
MW	UF28100V	100-500	100	10	28	50	AB	
MW	UF28150J	100-500	150	8	28	55	AB	
SB	D1210UK	2-175	10	10	12.5	50	AB	
SB	D1260UK	2-175	60	10	12.5	50	AB	
SB	D1001UK	2-175	20	16	28	50	AB	
SB	D1019UK	2-175	20	16	28	50	AB	
SB	D1002UK	2-175	40	16	28	50	AB	
SB	D1003UK	2-175	60	16	28	50	AB	
SB	D1023UK	2-175	60	16	28	50	AB	
SB	D1004UK	2-175	80	16	28	50	AB	
SB	D1005UK	2-175	80	16	28	50	AB	
SB	D1006UK	2-175	120	14	28	50	AB	
SB	D1082UK	2-200	4	13	28	40	AB	
SB	D1083UK	2-200	4	13	28	40	AB	
SB	D1084UK	2-200	4	13	28	40	AB	
SB	D1017UK	2-200	150	13	28	50	AB	
SB	D1027UK	2-200	150	13	28	50	AB	
SB	D1028UK	2-200	300	13	28	60	AB	
SB	D1029UK	2-200	350	13	28	60	AB	
SB	D1014UK	100-400	20	13	28	60	AB	
SB	D1015UK	100-400	125	13	28	50	AB	
SB	D1020UK	100-400	150	10	28	50	AB	
SB	D1021UK	100-400	125	13	28	50	AB	
SB	D1201UK	100-500	10	10	12.5	50	AB	
SB	D1202UK	100-500	20	10	12.5	50	AB	
SB	D1203UK	100-500	30	10	12.5	50	AB	
SB	D1207UK	100-500	20	10	12.5	50	AB	
SB	D1208UK	100-500	40	10	12.5	50	AB	

**MOSFETS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
SB	D1211UK	100-500	10	10	12.5	50	AB	
SB	D1212UK	100-500	100	10	12.5	50	AB	
SB	D1007UK	100-500	20	13	28	50	AB	
SB	D1008UK	100-500	40	13	28	50	AB	
SB	D1009UK	100-500	150	8	28	50	AB	
SB	D1010UK	100-500	125	10	28	60	AB	
SB	D1012UK	100-500	100	10	28	50	AB	
SB	D1013UK	100-500	10	13	28	50	AB	
SB	D1018UK	100-500	100	10	28	50	AB	
SB	D1022UK	100-500	100	10	28	50	AB	
<b>SB</b>	<b>D1213UK</b>	<b>1-1000</b>	<b>6</b>	<b>10</b>	<b>7.2</b>	<b>50</b>	<b>AB</b>	
SB	D1204UK	2-1000	30	10	12.5	50	AB	
<b>SM</b>	<b>SD2918</b>	<b>2-30</b>	<b>30</b>	<b>18</b>	<b>50</b>	<b>50</b>	<b>AB</b>	<b>In Production</b>
<b>SM</b>	<b>SD2933</b>	<b>2-30</b>	<b>300</b>	<b>20</b>	<b>50</b>	<b>50</b>	<b>AB</b>	<b>In Production/replacement for SD2923</b>
SM	SD2922	2-175	300	13	50	50	AB	
<b>SM</b>	<b>SD2931</b>	<b>2-175</b>	<b>150</b>	<b>14</b>	<b>50</b>	<b>55</b>	<b>AB</b>	<b>In Production</b>
<b>SM</b>	<b>SD2931-10</b>	<b>2-175</b>	<b>150</b>	<b>14</b>	<b>50</b>	<b>55</b>	<b>AB</b>	<b>In Production</b>
<b>SM</b>	<b>SD2932</b>	<b>2-175</b>	<b>300</b>	<b>15</b>	<b>50</b>	<b>50</b>	<b>AB</b>	<b>In Production</b>
<b>SM</b>	<b>SD2900</b>	<b>2-400</b>	<b>5</b>	<b>13.5</b>	<b>28</b>	<b>45</b>	<b>AB</b>	<b>In Production</b>
<b>SM</b>	<b>SD2902</b>	<b>2-400</b>	<b>15</b>	<b>12.5</b>	<b>28</b>	<b>45</b>	<b>AB</b>	<b>In Production</b>
<b>SM</b>	<b>SD2903</b>	<b>2-400</b>	<b>30</b>	<b>13</b>	<b>28</b>	<b>45</b>	<b>AB</b>	<b>In Production</b>
<b>SM</b>	<b>SD2904</b>	<b>2-400</b>	<b>30</b>	<b>10</b>	<b>28</b>	<b>45</b>	<b>AB</b>	<b>In Production</b>
<b>SB</b>	<b>LMP1603</b>	<b>150-162</b>	<b>5.5</b>	<b>37.4</b>	<b>7.2</b>	<b>38</b>		<b>Amplifier Module</b>
<b>SB</b>	<b>LMP2003</b>	<b>220-222</b>	<b>5.5</b>	<b>37.4</b>	<b>7.2</b>	<b>38</b>		<b>Amplifier Module</b>

**UHF  
TRANSISTORS**  
(Mobile Radio, Wideband Comm., Telecom, etc)

**LDMOS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
<b>EC</b>	<b>PTF10193</b>	<b>860-960</b>	<b>12</b>	<b>18</b>	<b>26</b>	<b>-30</b>	<b>60</b>	<b>AB</b>	
EC	PTF10019	860-900	70	13	28	-30	50	AB	INPUT MATCHED
EC	PTF10036	860-960	85	11	28	-30	55	AB	~MRF185
EC	PTF10020	860-960	125	11	28	-30	55	AB	PUSH PULL
<b>EC</b>	<b>PTF10100</b>	<b>860-900</b>	<b>165</b>	<b>12</b>	<b>28</b>	<b>-30</b>	<b>50</b>	<b>AB</b>	<b>INPUT MATCHED</b>
EC	PTF10136	1000	6	18.5	28	-22	57	AB	SURFACE MOUNT
<b>EC</b>	<b>PTF10137</b>	<b>1000</b>	<b>12</b>	<b>18</b>	<b>28</b>	<b>-24</b>	<b>60</b>	<b>AB</b>	<b>SURFACE MOUNT</b>
<b>EC</b>	<b>PTF10007</b>	<b>1000</b>	<b>35</b>	<b>12</b>	<b>28</b>	<b>-30</b>	<b>55</b>	<b>AB</b>	<b>~MRF182</b>
EC	PTF10031	1000	50	12	28	-30	55	AB	~MRF183
EC	PTF10015	1000	50	12	28	-30	55	AB	~MRF183S
EC	PTF10138	1000	60	11	28	-30	55	AB	~MRF184
EC	PTF10009	1000	85	12	28	-30	50	AB	PUSH PULL
<b>MO</b>	<b>MRF1535-T1</b>	<b>135-520</b>	<b>35</b>	<b>10.5</b>	<b>12.5</b>		<b>55</b>	<b>AB</b>	<b>T Suffix - Tape &amp; Reel - reel of 1000</b>
<b>MO</b>	<b>MRF373</b>	<b>470-1000</b>	<b>60</b>	<b>14.7</b>	<b>28</b>		<b>54</b>	<b>AB</b>	<b>unmatched</b>
<b>MO</b>	<b>MRF374</b>	<b>470-1000</b>	<b>100pep</b>	<b>13.5</b>	<b>28</b>		<b>36</b>	<b>AB</b>	<b>unmatched</b>
<b>MO</b>	<b>MRF6522-5R1</b>	<b>800-1000</b>	<b>5cw</b>	<b>19</b>	<b>26</b>		<b>55</b>	<b>AB</b>	<b>R1 - Tape &amp; Reel - 500 (unmatched)</b>
<b>MO</b>	<b>MRF6522-10R1</b>	<b>800-1000</b>	<b>10cw</b>	<b>17</b>	<b>26</b>		<b>55</b>	<b>AB</b>	<b>R1 - Tape &amp; Reel - 500 (unmatched)</b>
<b>MO</b>	<b>MRF6522-70</b>	<b>800-1000</b>	<b>70</b>	<b>16</b>	<b>26</b>		<b>55</b>	<b>AB</b>	<b>matched</b>
<b>MO</b>	<b>MRF187</b>	<b>800-1000</b>	<b>85pep</b>	<b>13</b>	<b>26</b>	<b>-28</b>	<b>33</b>	<b>AB</b>	<b>matched</b>
<b>MO</b>	<b>MRF181SR1</b>	<b>800-1000</b>	<b>7.5pep</b>	<b>17</b>	<b>28</b>		<b>32.5</b>	<b>AB</b>	<b>R1 - Tape &amp; Reel - 500 (unmatched)</b>
<b>MO</b>	<b>MRF182</b>	<b>800-1000</b>	<b>30cw</b>	<b>14</b>	<b>28</b>		<b>58</b>	<b>AB</b>	<b>Obsolete; Recommend MRF9060</b>
<b>SM</b>	<b>PD54003</b>	<b>380-520</b>	<b>3</b>	<b>11</b>	<b>7.5</b>		<b>50</b>	<b>AB</b>	<b>Avail. in straight lead version--add 's' suffix</b>
<b>SM</b>	<b>PD54008</b>	<b>380-520</b>	<b>8</b>	<b>11</b>	<b>7.5</b>		<b>45</b>	<b>AB</b>	<b>Avail. in straight lead version--add 's' suffix</b>
<b>SM</b>	<b>PD55003</b>	<b>380-520</b>	<b>3</b>	<b>15</b>	<b>12.5</b>		<b>55</b>	<b>AB</b>	<b>IN DEVELOPMENT</b>
<b>SM</b>	<b>PD55008</b>	<b>380-520</b>	<b>8</b>	<b>15</b>	<b>12.5</b>		<b>53</b>	<b>AB</b>	<b>Avail. in straight lead version--add 's' suffix</b>
<b>SM</b>	<b>PD55015</b>	<b>380-520</b>	<b>15</b>	<b>14</b>	<b>12.5</b>		<b>50</b>	<b>AB</b>	<b>Avail. in straight lead version--add 's' suffix</b>

**LDMOS CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
SM	PD57018	800-960	18	13	28		55	AB	In Development-straight lead version-add 's' suffix
SM	SD5730/01	800-960	30	12	28		50	AB	In Development
SM	SD57045	800-960	45	12	28		50	AB	Samples Available
SM	SD5760/01	800-960	60	12	28		50	AB	In Development
SM	SD57085	800-960	85	11	28		45	AB	In Development
SM	SD57120	800-960	120	10	28		45	AB	Samples Available
SM	SD57170	800-960	170	10	28		45	AB	In Development

**BIPOLARS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
EC	PTB20204	380-500	1	12.5	24	-40		A	
EC	PTB20200	380-500	30	10	24	-30	50	AB	
EC	PTB20030	420-470	15	11	24	-28	50	AB	
EC	PTB20031	420-470	40	8	24	-22	50	AB	
GZ	0104-100	100-500	100	7	28		50	C	
GZ	0105-12	100-500	12	7.8	28		60	C	
GZ	0105-50	100-500	50	8.5	28		55	C	
GZ	0105-100	100-500	100	6.2	28		50	C	
GZ	C1-28	225-400	1	10	28		65	C	
GZ	UMIL3	225-400	3	12	28		60	C	
GZ	UMIL10	225-400	10	10	28		60	C	
GZ	UMIL25	225-400	25	8.9	28		50	C	
GZ	UMIL60	225-400	60	8.8	28		60	C	
GZ	UMIL70	225-400	70	8.5	28		60	C	
GZ	UMIL80	225-400	80	9	28		60	C	
GZ	UMIL100	225-400	100	7.2	28		55	C	
GZ	UMIL100A	225-400	100	7.2	28		55	C	
GZ	0204-125	225-400	125	8.5	28		60	C	
MO	MRF392	100-400	125	8	28		55	C	matched
MO	MRF393	100-512	100	7.5	28		55	C	matched
MY	MS1509	100-500	100	5.5	28		55	C	

**BIPOLARS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MY	SD1050	225-400	3	4.7	28		40	C	
MY	SD4012	225-400	3	11.7	28		60	C	
MY	SD1060	225-400	5	4.7	28		45	C	
MY	SD1075	225-400	10	4	28		45	C	
MY	MS1633	225-400	15	4.7	28		50	C	
MY	MS1527	225-400	25	9	28		50	C	
MY	SD1462	225-400	70	9	28		60	C	
MY	MS1503	225-400	100	7	28		60	C	
MY	MS1508	225-400	125	7	28		60	C	
MY	SD1144	450-512	2	9	12.5			C	
MY	MS1402	450-512	2	10	12.5			C	
MY	MS1404	450-512	5	8.5	12.5			C	
MY	MS1426	450-512	10	7	12.5			C	
MY	SD1146	450-512	10	6	12.5			C	
MY	SD1429	450-512	12	7.8	12.5			C	
MY	SD1429-03	450-512	15	7.8	12.5			C	
MY	SD1422	450-512	25	6.2	12.5			C	
MY	MS1510	450-512	38	5.8	12.5			C	
MY	MS1480	450-512	45	5	12.5			C	
MY	MS3016	1000	2	10	28			C	
MY	MS3017	1000	5	10	28			C	
MY	MS3018	1000	10	10	28			C	
MY	MS3019	1000	20	10	28			C	
MY	MS3020	1400	2	10	28			C	
MY	MSC81406	1400	6	9.7	28			C	
MY	MS3021	1400	10	8.5	28			C	
MY	MS3022	2000	1	7	28			C	
MY	MS3023	2000	3	7.8	28			C	
MY	MS3024	2000	5	7	28			C	
MY	MS3025	2000	10	5	28			C	

**BIPOLARS CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
MY	MS3451	2300	1.8	10	22			C	
MY	MS3452	2300	3.8	10	22			C	
MY	MS3453	2300	5.5	9.6	22			C	
MY	MS3454	2300	7	9.6	22			C	
MY	MSC3000	3000	0.5	7	28			C	
MY	MS3383	3000	1	7	28			C	
MY	MS3384	3000	2.5	5	28			C	
MY	MS3302	3000	4.5	4.5	28			C	
MY	MSC4000	4000	0.5	5	28			C	
MY	MSC4001	4000	1	5	28			C	
MY	MSC4003	4000	2.5	5	28			C	
SM	SD4013	225-400	25	9	28		50	C	
SM	SD1470	225-400	100	7	28		60	C	On LTB
SM	SD1463	225-400	125	7	28		60	C	
SM	SD1134	450-512	2	10	12.5		55	C	
SM	SD1135	450-512	5	8.5	12.5		60	C	
SM	SD1433	450-512	10	7	12.5		60	C	
SM	SD1488	450-512	38	5.8	12.5		55	C	
SM	SD1434	450-512	45	5	12.5			C	
SM	SD1390	450-512	1.5	13	24			A	
SM	SD1391	450-512	15	10.8	24		50	AB	
SM	SD1393	450-512	50	9	24		60	AB	
SM	MSC82100	1000	0.5	10.5	18			A	
SM	MSC82040	1000	0.5	10.5	18			A	
SM	MSC81090	1000	1	-	20			C	
SM	SD5000	1000	1.5	9.5	20			A	
SM	MSC81002	1000	2	10	28			C	
SM	MSC81118	1000	2	10	28			C	
SM	MSC81005	1000	5	10	28			C	
SM	MSC81111	1000	5	10	28			C	
SM	MSC81010	1000	10	10	28			C	
SM	MSC81058	1000	10	10	28			C	

**BIPOLARS CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	Class	Comment
SM	MSC81020	1000	20	10	28	C	
SM	MSC81402	1400	2	10	28	C	
SM	MSC80195	2000	0.75	7.5	18	A	
SM	MSC80185	2000	0.75	7.5	18	A	
SM	MSC80196	2000	1	7	18	A	
SM	MSC80186	2000	1	7	18	A	
SM	MSC80197	2000	1.5	6	18	A	
SM	MSC82001	2000	1	7	28	C	
SM	MSC82003	2000	3	7.8	28	C	
SM	MSC82005	2000	5	7	28	C	
SM	MSC82010	2000	10	5	28	C	
SM	MSC82302	2300	1.8	10	22	C	
SM	MSC82304	2300	3.8	10	22	C	
SM	MSC82306	2300	5.5	9.6	22	C	
SM	MSC82307	2300	7	9.6	22	C	
SM	MSC83301	3000	1	7	28	C	
SM	MSC83303	3000	2.5	5	28	C	
SM	MSC83305	3000	4.5	4.5	28	C	
MO	MHL8115	40-1000	1	17.5	15	A	near Amplifier Module
MO	MHL8118	40-1000	1	17.5	28	A	near Amplifier Module

**MOSFETS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
MO	MRF136Y	10-400	30	14	28		54	AB	LTB 10/2/2000
MO	MRF137	10-400	30	13	28		60	AB	LTB 12/31/2002
MO	MRF177	100-400	100	12	28		60	AB	
MO	MRF158	30-512	2	17.5	28		52	AB	unmatched
MO	MRF160	30-512	4	17	28		55	AB	unmatched
MO	MRF166C	30-512	20	16	28		55	AB	unmatched

UHF

**MOSFETS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MO	MRF166W	30-512	40	16	28		55	AB	unmatched
MO	MRF177	100-400	100	12	28		60	AB	unmatched
MO	MRF275L	150-512	100	8.8	28		55	AB	unmatched
MO	MRF275G	150-512	150	11.2	28		55	AB	unmatched
MW	UF2801K1	100-500	1	10	28		45	AB	
MW	UF2805B	100-500	5	10	28		50	AB	
MW	UF2810P	100-500	10	10	28		50	AB	
MW	UF2815B	100-500	15	10	28		50	AB	
MW	UF2820P	100-500	20	10	28		50	AB	
MW	UF2820R	100-500	20	10	28		50	AB	
MW	UF2840G	100-500	40	10	28		50	AB	
MW	UF2840P	100-500	40	10	28		50	AB	
MW	UF28100H	100-500	100	10	28		50	AB	
MW	UF28100M	100-500	100	10	28		50	AB	
MW	UF28100V	100-500	100	10	28		50	AB	
MW	UF28150J	100-500	150	8	28		55	AB	
MW	LF2802A	500-1000	2	10	28		40	AB	
MW	LF2805A	500-1000	5	10	28		50	AB	
MW	LF2810A	500-1000	10	10	28		50	AB	
SB	D1209UK	1-500	20	10	12.5		50	AB	
SB	D1014UK	100-400	20	13	28		60	AB	
SB	D1015UK	100-400	125	13	28		50	AB	
SB	D1021UK	100-400	125	13	28		50	AB	
SB	D1020UK	100-400	150	10	28		50	AB	
SB	D1201UK	100-500	10	10	12.5		50	AB	
SB	D1211UK	100-500	10	10	12.5		50	AB	
SB	D1202UK	100-500	20	10	12.5		50	AB	
SB	D1203UK	100-500	30	10	12.5		50	AB	
SB	D1207UK	100-500	20	10	12.5		50	AB	
SB	D1208UK	100-500	40	10	12.5		50	AB	



**MOSFETS CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
SB	D1212UK	100-500	100	10	12.5		50	AB	
SB	D1013UK	100-500	10	13	28		50	AB	
SB	D1007UK	100-500	20	13	28		50	AB	
SB	D1008UK	100-500	40	13	28		50	AB	
SB	D1009UK	100-500	150	8	28		50	AB	
SB	D1010UK	100-500	125	10	28		60	AB	
SB	D1012UK	100-500	100	10	28		50	AB	
SB	D1018UK	100-500	100	10	28		50	AB	
SB	D1022UK	100-500	100	10	28		50	AB	
SB	D2282UK	1-1000	0.75	8	6		40	AB	
SB	D2224UK	1-1000	5	7	7.2		50	AB	
SB	D1213UK	1-1000	6	10	7.2		50	AB	
SB	D2211UK	1-1000	10	7	7.2		40	AB	
SB	D2081UK	1-1000	0.75	11	12		40	AB	
SB	D2229UK	1-1000	2.5	10	12.5		40	AB	
SB	D2201UK	1-1000	2.5	10	12.5		40	AB	
SB	D2232UK	1-1000	5	7	12.5		50	AB	
SB	D2202UK	1-1000	5	10	12.5		40	AB	
SB	D2225UK	1-1000	5	10	12.5		40	AB	
SB	D2230UK	1-1000	5	10	12.5		40	AB	
SB	D2253UK	1-1000	5	13	12.5		40	AB	
SB	D2221UK	1-1000	7.5	10	12.5		40	AB	
SB	D2231UK	1-1000	7.5	10	12.5		40	AB	
SB	D1231UK	1-1000	10	10	12.5		50	AB	
SB	D2259UK	1-1000	10	10	12.5		40	AB	
SB	D2293UK	1-1000	10	11	12.5		50	AB	
SB	D2294UK	1-1000	15	11	12.5		50	AB	
SB	D2210UK	1-1000	20	10	12.5		40	AB	
SB	D2218UK	1-1000	20	10	12.5		40	AB	
SB	D2213UK	1-1000	20	10	12.5		40	AB	
SB	D1204UK	1-1000	30	10	12.5		50	AB	
SB	D2029UK	1-1000	2.5	13	28		40	AB	
SB	D2030UK	1-1000	5	13	28		40	AB	
SB	D2005UK	1-1000	7.5	13	28		40	AB	
SB	D2031UK	1-1000	7.5	13	28		40	AB	
SB	D1011UK	1-1000	10	13	28		50	AB	

**MOSFETS CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
SB	D1031UK	1-1000	10	13	28		50	AB	
SB	D1093UK	1-1000	10	13	28		50	AB	
SB	D2006UK	1-1000	15	13	28		40	AB	
SB	D1016UK	1-1000	20	13	28		50	AB	
SB	D2010UK	1-1000	20	10	28		40	AB	
SB	D1094UK	1-1000	20	11	28		50	AB	
SB	D1053UK	1-1000	50	7.5	28		45	AB	
SB	D2083UK	1-1000	80	8	28		40	AB	
SB	D2084UK	1-1000	100	8	28		40	AB	
SB	D2085UK	1-1000	120	8	28		40	AB	
<b>SB</b>	<b>D2053UK</b>	<b>1000</b>	<b>5</b>	<b>13</b>	<b>28</b>				
<b>SB</b>	<b>D2054UK</b>	<b>1000</b>	<b>10</b>	<b>13</b>	<b>28</b>				
SB	D2219UK	1-2000	2.5	10	12.5		40	AB	
SB	D2203UK	1-2000	5	10	12.5		40	AB	
SB	D2212UK	1-2000	10	10	12.5		40	AB	
SB	D2220UK	1-2000	5	10	12.5		40	AB	
SB	D2089UK	1-2000	1	8	28		40	AB	
SB	D2001UK	1-2000	2.5	13	28		40	AB	
SB	D2019UK	1-2000	2.5	13	28		40	AB	
SB	D2002UK	1-2000	5	13	28		40	AB	
SB	D2003UK	1-2000	5	13	28		40	AB	
SB	D2020UK	1-2000	5	13	28		40	AB	
SB	D2004UK	1-2000	10	13	28		40	AB	
SB	D2012UK	1-2000	10	10	28		50	AB	
SB	D2013UK	1-2000	20	10	28		50	AB	
SB	D2082UK	1-2000	40	8	28		40	AB	

**UHF PULSED RADAR APPLICATIONS**

**BIPOLARS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Pulse Width uSEC	Duty Cycle %
GZ	UDR450	400-450	400	7.5	40		60	C	60	2
GZ	UDR500	400-450	500	8.5	40		60	C	60	2
(ALL COMMON EMITTER CONFIGURATON)										
MY	MS2176	400-500	300	9.6	40		50	C	250	10
MY	MS2177	400-500	400	7	40		50	C	60	2
MY	MS2200	400-500	500	9.7	40		50	C	250	10
MY	SD1511-08	425	10	9.2	28		50	C	CW	CW
MY	SD1474	425	48	6.8	28		50	C	CW	CW
MY	AM0608-020	600-750	20	9	35		40	C	10	1
MY	AM0608-070	600-750	70	7.3	50		35	C	10	1
MY	MS2090	600-750	220	8.7	50		40	C	10	1
MY	MS2091	600-750	445	6.9	50		40	C	10	1
MY	AM0710-300	750-950	300	8.8	50		40	C	10	10
SM	SD1563	400-500	300	9.6	40		50	C	250	10
SM	SD1565	400-500	500	9.7	40		50	C	250	10
SM	AM0608-200	600-750	220	8.7	50		40	C	10	1
SM	AM0608-450	600-750	445	6.9	50		40	C	10	1
SM	AM80610-030	620-960	30	8.5	28		50	C		CW

**FM BASE STATION**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
MY	MS1455	806-960	45	4.7	12.5				
MY	SD1400-02	806-960	14	9.7	24		55	C	Configuration: Common Base
MY	SD1496	806-960	60	7.5	24		50	C	Configuration: Common Base
MY	MS1553	806-960	60	7	24		55	C	Configuration: Common Base
MY	SD1400-03	806-960	14	9.5	24		50	C	Configuration: Common Base
MY	SD1495-03	806-960	30	7	24		50	C	Configuration: Common Base
MY	SD1496-03	806-960	55	7.4	24		50	C	Configuration: Common Base

**VHF/UHF TV LINEAR  
TRANSISTORS**

**LDMOS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
EC	PTF10049	470-860	85	12	32	-32	50	AB	INT. MATCHED
EC	PTF10159	470-860	120	12	32/28	-33	50	AB	INT. MATCHED
MO	MRF373	470-1000	60	14.7	28		54	AB	unmatched
MO	MRF373S	470-1000	60	14.7	28		54	AB	unmatched
MO	MRF374	470-1000	100pep	13.5	28	-31	36	AB	unmatched
MO	MRF372	470-1000	180pep	17	32	-30	40	AB	unmatched
MO	MRF376	470-1000	240	14	50		55	AB	In Development

**BIPOLARS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
GZ	VTV075	175-225	7.5	10	25	-55	33	A	
GZ	VTV150	175-225	15	8	25	-55	33	A	
GZ	VTV300	175-225	30	6	25	-55	30	A	
GZ	VTV1250	175-225	125	10	28		60	AB	
MY	MS1277	174-230	14	14	28	-55		A	
MY	MS1279	174-230	20	8	28	-55		A	
MY	MS1280	174-230	20	7.5	28	-53		A	
MY	MS1278	174-230	100	11	28	-51		A	
MY	SD1485	174-230	200	11	32		50	AB	
SM	SD1476	55-88	240	12	32		50	AB	
SM	SD1458	174-230	14	14	28	-55		A	
SM	SD1455	174-230	20	8	25	-51		A	
SM	SD1459	174-230	20	7.5	28	-53		A	
SM	SD1456	174-230	100	11	28	-51	70	AB	

**MOSFETS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MO	MRF154	2-100	600	17	50	-25	45	AB	unmatched
MO	MRF157	2-100	600	20	50	-25	45	AB	unmatched
MO	MRF150	2-150	150	17	50	-32		AB	unmatched
MO	MRF141	2-175	150	10	28		55	AB	unmatched
MO	MRF141G	2-175	300	13	28		55	AB	unmatched
MO	MRF151	2-175	150	13	50		45	AB	unmatched
MO	MRF151G	2-175	300	16	50		55	AB	unmatched
MO	MRF148A	2-225	30	18	50	-35	55	AB	unmatched
MO	MRF134	30-225	5	14	28		55	AB	unmatched
MO	MRF136	30-225	15	16	28		60	AB	unmatched
MO	MRF171A	30-225	45	19.5	28	-32	65	AB	unmatched
MO	MRF173	30-225	80	13	28		65	AB	unmatched
MO	MRF174	30-225	125	11.8	28		60	AB	unmatched
MO	MRF158	30-512	2	17.5	28		52	AB	unmatched
MO	MRF160	30-512	4	17	28		55	AB	unmatched
MO	MRF166C	30-512	20	16	28		55	AB	unmatched
MO	MRF166W	30-512	40	16	28		55	AB	unmatched
MO	MRF177	100-400	100	12	28		60	AB	unmatched
MO	MRF275L	150-512	100	8.8	28		55	AB	unmatched
MO	MRF275G	150-512	150	11.2	28		55	AB	unmatched
SB	D1028UK	1-240	300	13	28		60	AB	
SB	D1029UK	1-240	350	13	28		60	AB	
<b>SB</b>	<b>LMP2003</b>	<b>220-222</b>	<b>5.5</b>	<b>37.4</b>	<b>7.2</b>		<b>38</b>		<b>Amplifier Module</b>

**UHF TV  
TRANSISTORS**

**BIPOLARS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
EC	PTB20206	470-860	1	11	20	-44		A	
EC	PTB20188	470-860	4	7	25	-58		A	
EC	PTB20011	470-860	20	8.5	26	-46		A	
EC	PTB20091	470-860	30	11	25	-50		A	
EC	PTB20162	470-900	40	8	25	-32	50	AB	
EC	PTB20020	470-860	150	8	30	-35	50	AB	
EC	PTB20081	470-860	150	8.5	28		55	AB	
EC	PTB20237	470-860	150	8	28	-44	50	AB	
EC	PTB20101	470-860	175	10	28		55	AB	
EC	PTB20190	470-800	175	8	28	-40	45	AB	
GZ	UTV005	470-860	0.5	10	20	-60		A	
GZ	UTV010	470-860	1	10	20	-60		A	
GZ	UTV020	470-860	2	10	25	-60		A	
GZ	UTV040	470-860	4	8.5	25	-60		A	
GZ	UTV080	470-860	8	9	26.5	-58		A	
GZ	UTV120	470-860	12	8.9	26.5	-52		A	
GZ	UTV200	470-860	20	8.5	26.5	-48		A	
GZ	UTV100B	470-860	100	8.5	28		55	AB	
GZ	UTV8100B	470-860	100	8.5	28		55	AB	
MO	TPV8100B	470-860	100	9.5	28		58	AB	matched linear transistor
MY	MS1502	470-860	0.5	11.5	20	-58		A	
MY	MS1512	470-860	1	10	20	-58		A	
MY	MS1501	470-860	2	8.5	25	-60		A	
MY	MS1581	470-860	4	7	25	-60		A	
MY	MS1531	470-860	4	8	25	-60		A	
MY	MS1579	470-860	14	8.5	25	-45		A	
MY	MS1532	470-860	20	9.5	26.5	-48		A	
MY	MS1582	470-860	25	8	25	-45		A	
MY	MS1584	470-860	50	6.8	28	-30		AB	

**BIPOLARS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MY	MS1586	470-860	100	10	28	-30		AB	
MY	MS1576	470-860	150	8.5	28	-30		AB	
MY	MS1533	470-860	150	6.5	28	-30		AB	
SM	SD1448	470-860	4	7	25	-60		A	
SM	SD4011	470-860	4	8	25	-60		A	
SM	SD1732	470-860	14	8.5	25	-45		A	
SM	SD4010	470-860	20	9.5	26.5	-48		A	
SM	SD1490	470-860	25	8	25	-45		A	
SM	SD1489	470-860	50	6.8	28		45	AB	
SM	SD1492	470-860	150	6.5	28		45	AB	
SM	SD4100	470-860	100	8.5	28		53	AB	
SM	SD4200	470-860	150	8.5	28		50	AB	In Development

**GENERAL PURPOSE  
TRANSISTORS**

**BIPOLARS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MO	MRF858S	840-900	3.6cw	11	24			A	Not Recommended for New Design (unmatched)
MO	MRF898	850-900	60cw	7	24		65	C	Not Recommended for New Design (matched)
MO	MRF897	900	30	10	24	-37	38	AB	Not Recommended for New Design (matched)
MO	MRF897R	900	30	10.5	24	-37	38	AB	Not Recommended for New Design (matched)
MO	MRF899	900	150	8	26	-32	40	AB	Not Recommended for New Design (matched)
MO	MRF6409	921-960	20	10	26		60	AB	Not Recommended for New Design (matched)
MO	MRF6414	921-960	50	8.5	26		55	AB	Not Recommended for New Design (matched)
MO	MRF16006	1600-1640	6	7.4	28		40	C	
MO	MRF16030	1600-1640	30	7.5	28		40	C	
MW	LF2802A	500-1000	2	10	28		40	AB	
MW	LF2805A	500-1000	5	10	28		50	AB	
MW	LF2810A	500-1000	10	10	28		50	AB	
MY	MS3000	1000	27	10.5	18			A	
MY	MS3002	1000	31.8	9.5	20			A	
MY	MS3016	1000	2	10	28			C	
MY	MS3017	1000	5	10	28			C	
MY	MS3018	1000	10	10	28			C	
MY	MS3019	1000	20	10	28			C	
MY	MS3020	1400	2	10	28			C	
MY	MSC81406	1400	6	9.7	28			C	
MY	MSC80064	2000	20.5	9	18			A	
MY	MS3009	2000	28	7.5	18			A	
MY	MS3011	2000	30	7	18			A	
MY	MS3013	2000	31.7	6	18			A	



**BIPOLARS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MY	MS3014	2000	34	6	18			A	
MY	MS3003	2000	24	10	20			A	
MY	MS3006	2000	27	8	20			A	
MY	SD1851	2000	29	8	20			A	
MY	SD1853	2000	31.8	7	20			A	
MY	MS3015	2000	34	6	20			A	
MY	MS3023	2000	3	7.8	28			C	
MY	MS3024	2000	5	7	28			C	
MY	MS3025	2000	10	5	28			C	
MY	SD1850	2300	23	11	15			A	
MY	MS3451	2300	1.8	10	22			C	
MY	MS3452	2300	3.8	10	22			C	
MY	MS3453	2300	5.5	9.6	22			C	
MY	MS3454	2300	7	9.6	22			C	
MY	MSC3000	3000	0.5	7	28			C	
MY	MS3383	3000	1	7	28			C	
MY	MS3384	3000	2.5	5	28			C	
MY	MS3302	3000	4.5	4.5	28			C	
MY	MSC80264	4000	20	6	12			A	
MY	MSC4000	4000	0.5	5	28			C	
MY	MSC4001	4000	1	5	28			C	
MY	MSC4003	4000	2.5	5	28			C	
SM	MSC82100	1000	0.5	10.5	18			A	
SM	MSC82040	1000	0.5	10.5	18			A	
SM	MSC81090	1000	1	-	20			C	
SM	SD5000	1000	1.5	9.5	20			A	
SM	MSC81002	1000	2	10	28			C	
SM	MSC81118	1000	2	10	28			C	
SM	MSC81005	1000	5	10	28			C	
SM	MSC81111	1000	5	10	28			C	
SM	MSC81010	1000	10	10	28			C	

**BIPOLARS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
SM	MSC81058	1000	10	12	28			C	
SM	MSC81020	1000	20	10	28			C	
SM	MSC81402	1400	2	10	28			C	
SM	MSC80195	2000	0.8	7.5	18			A	
SM	MSC80185	2000	0.8	7.5	18			A	
SM	MSC80196	2000	1	7	18			A	
SM	MSC80186	2000	1	7	18			A	
SM	MSC80197	2000	1.5	6	18			A	
SM	SD1855	2000	3	6	20			A	
SM	MSC82001	2000	1	7	28			C	
SM	MSC82003	2000	3	7.8	28			C	
SM	MSC82005	2000	5	7	28			C	
SM	MSC82010	2000	10	5	28			C	
SM	MSC82302	2300	1.8	10	22			C	
SM	MSC82304	2300	3.8	10	22			C	
SM	MSC82306	2300	5.5	9.6	22			C	
SM	MSC82307	2300	7	9.6	22			C	
SM	MSC83301	3000	1	7	28			C	
SM	MSC83303	3000	2.5	5	28			C	
SM	MSC83305	3000	4.5	4.5	28			C	

**MOSFETS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
SB	D2224UK	1-1000	5	7	7.2		50	AB	
SB	D2211UK	1-1000	10	7	7.2		40	AB	
SB	D2229UK	1-1000	2.5	10	12.5		40	AB	
SB	D2225UK	1-1000	5	10	12.5		40	AB	
SB	D2230UK	1-1000	5	10	12.5		40	AB	
SB	D2232UK	1-1000	5	7	12.5		50	AB	
SB	D2253UK	1-1000	5	13	12.5		40	AB	

**MOSFETS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
SB	D2231UK	1-1000	7.5	10	12.5		40	AB	
SB	D2221UK	1-1000	7.5	10	12.5		40	AB	
SB	D2259UK	1-1000	10	10	12.5		40	AB	
SB	D2293UK	1-1000	10	11	12.5		50	AB	
SB	D2294UK	1-1000	15	11	12.5		50	AB	
SB	D2218UK	1-1000	20	10	12.5		40	AB	
SB	D2210UK	1-1000	20	10	12.5		40	AB	
SB	D2029UK	1-1000	2.5	13	28		40	AB	
SB	D2030UK	1-1000	5	13	28		40	AB	
SB	D2031UK	1-1000	7.5	13	28		40	AB	
SB	D1031UK	1-1000	10	13	28		50	AB	
SB	D2010UK	1-1000	20	10	28		40	AB	
SB	D2282UK	500-1000	0.75	8	6		40	AB	
SB	D2081UK	500-1000	0.75	11	12.5		40	AB	
SB	D2201UK	500-1000	2.5	10	12.5		40	AB	
SB	D2219UK	500-1000	2.5	10	12.5		40	AB	
SB	D2202UK	500-1000	5	10	12.5		40	AB	
SB	D2203UK	500-1000	5	10	12.5		40	AB	
SB	D2220UK	500-1000	5	10	12.5		40	AB	
SB	D2212UK	500-1000	10	10	12.5		40	AB	
SB	D2213UK	500-1000	20	10	12.5		40	AB	
SB	D2001UK	500-1000	2.5	13	28		40	AB	
SB	D2019UK	500-1000	2.5	13	28		40	AB	
SB	D2002UK	500-1000	5	13	28		40	AB	
SB	D2003UK	500-1000	5	13	28		40	AB	
SB	D2020UK	500-1000	5	13	28		40	AB	
SB	D2005UK	500-1000	7.5	13	28		40	AB	
SB	D1011UK	500-1000	10	13	28		50	AB	
SB	D1093UK	500-1000	10	13	28		50	AB	
SB	D2004UK	500-1000	10	13	28		40	AB	
SB	D2012UK	500-1000	10	10	28		50	AB	
SB	D2006UK	500-1000	15	13	28		40	AB	
SB	D1016UK	500-1000	20	13	28		50	AB	
SB	D1094UK	500-1000	20	11	28		50	AB	

**MOSFETS CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
SB	D2013UK	500-1000	20	10	28		50	AB	
SB	D2082UK	500-1000	40	8	28		40	AB	
SB	D1053UK	500-1000	50	7.5	28		45	AB	
SB	D2083UK	500-1000	80	8	28		40	AB	
SB	D2084UK	500-1000	100	8	28		40	AB	
SB	D2085UK	500-1000	120	8	28		40	AB	

**LNA**

Brand	Part Number	f T	G u (Max)			
		Frequency MHz	f (dB)	Gain dB	Vce (V)	Ic (mA)
MY	BFR96	500	500	14.5	10	10
MY	2N5179	900	200	20	6	1.5
MY	MRF5943C	1000	200	11.4	15	35
MY	2N5031	1200	-	12	-	-
MY	2N5109	1200	-	12	-	-
MY	MRF5943	1300	-	15	-	-
MY	BFY90	1300	500	19	5	2
MY	2N6304	1400	450	14	5	2
MY	2N2857	1600	500	13	6	1.5
MY	MRF586	3000	-	12.5	-	-
MY	MRF517	4000	300	9	15	50
MY	MRF904	4000	450	11	6	5
MY	MRF914	4500	500	15	10	5
MY	MRF581	5000	500	15	10	50
MY	MRF581A	5000	500	15	10	50
MY	BFR91	5000	500	16.5	5	2
MY	MRF5812	5000	500	17.8	10	50
MY	BFR90	5000	500	18	10	2
MY	MRF951	8000	1000	-	6	5

Configuration: Common Emitter

Tape &amp; Reel: R1 = 500 pcs (SO-8) R2 = 2500 PCS (SO-8) T = 500 PCS (Macro)

PA

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	EFF %
MY	MRF4427	175	0.15	18	12	60
MY	2N4427	175	1	10	12.5	50
MY	MRF553	175	1.5	11.5	12.5	50
MY	MRF553T	175	1.5	11.5	12.5	50
MY	MFR607	175	1.75	11.5	12.5	50
MY	2N6255	175	3	7.8	12.5	50
MY	2N3866A	400	1	10	28	45
MY	2N3866	400	1	10	28	45
MY	MRF3866	400	1	10	28	45
MY	MRF555	470	1.5	11	12.5	50
MY	MRF555T	470	1.5	11	12.5	50
MY	MRF559	870	0.5	6.5	7.5	70
MY	MRF8372	870	0.75	8	12.5	55
MY	MRF557	870	1.5	8	12.5	55
MY	MRF557T	870	1.5	8	12.5	55

Configuration: Common Emitter

Tape & Reel: R1 = 500 pcs (SO-8) R2 = 2500 pcs (SO-8) T= 500 pcs (Macro)

**CELLULAR, GSM, PAGING  
TRANSISTORS**

**LDMOS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
EC	PTF10133	860-900	85	13	28	-30	50	AB	
<b>EC</b>	<b>PTF10100</b>	<b>860-900</b>	<b>165</b>	<b>12</b>	<b>28</b>	<b>-30</b>	<b>50</b>	<b>AB</b>	<b>INPUT MATCHED</b>
EC	PTF10162	860-960	18	14	26	-30	55	AB	
<b>EC</b>	<b>PTF10160</b>	<b>860-960</b>	<b>85</b>	<b>15</b>	<b>26</b>	<b>-30</b>	<b>53</b>	<b>AB</b>	
EC	PTF10019	860-960	63	10	28	-30	50	AB	INPUT MATCHED
EC	PTF10036	860-960	85	11	28	-30	55	AB	~MRF185
EC	PTF10020	860-960	125	11	28	-30	55	AB	PUSH PULL
<b>EC</b>	<b>PTF10149</b>	<b>921-960</b>	<b>70</b>	<b>16</b>			<b>50</b>		
EC	PTF10147	1000	10	15	26				
<b>EC</b>	<b>PTF10136</b>	<b>1000</b>	<b>6</b>	<b>18</b>	<b>28</b>	<b>-22</b>	<b>57</b>	<b>AB</b>	<b>SURFACE MOUNT</b>
<b>EC</b>	<b>PTF10137</b>	<b>1000</b>	<b>12</b>	<b>18</b>	<b>28</b>	<b>-24</b>	<b>60</b>	<b>AB</b>	<b>SURFACE MOUNT</b>
EC	PTF10007	1000	35	12	28	-30	55	AB	~MRF182
<b>EC</b>	<b>PTF10041</b>	<b>1000</b>	<b>35</b>	<b>13.5</b>	<b>28</b>	<b>-28</b>	<b>55</b>	<b>AB</b>	
EC	PTF10031	1000	45	12	28	-30	55	AB	~MRF183
EC	PTF10015	1000	50	12	28	-30	55	AB	~MRF183S
EC	PTF10009	1000	90	12	28	-30	50	AB	PUSH PULL
<b>EC</b>	<b>PTF10139</b>	<b>1000</b>	<b>60</b>	<b>12</b>	<b>60</b>	<b>-30</b>	<b>48</b>	<b>AB</b>	<b>~MRF184S</b>
<b>EC</b>	<b>PTF10138</b>	<b>1000</b>	<b>60</b>	<b>12</b>	<b>60</b>	<b>-30</b>	<b>48</b>	<b>AB</b>	<b>~MRF184</b>
	(ALL COMMON SOURCE CONFIGURATION)								
	(ALL GOLD METALLIZATION)								
MO	MRF187	860-880	85pep	13	26	-31	33	AB	Obsolete; recommend MRF9085
MO	MRF187S	860-880	85pep	13	26	-31	33	AB	matched
<b>MO</b>	<b>MRF9085</b>	<b>860-880</b>	<b>90pep</b>	<b>17.9</b>	<b>26</b>		<b>40</b>	<b>AB</b>	matched
<b>MO</b>	<b>MRF9085S</b>	<b>860-880</b>	<b>90pep</b>	<b>17.9</b>	<b>26</b>		<b>40</b>	<b>AB</b>	matched
<b>MO</b>	<b>MRF9180</b>	<b>860-880</b>	<b>170pep</b>	<b>17.5</b>	<b>26</b>		<b>37.5</b>	<b>AB</b>	
<b>MO</b>	<b>MRF9180S</b>	<b>860-880</b>	<b>170pep</b>	<b>17.5</b>	<b>26</b>		<b>37.5</b>	<b>AB</b>	

**LDMOS CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
MO	MRF181SR1	800-1000	7.5pep	17	28		32.5	AB	TAPE & REEL PACKAGING (500 UNITS)
MO	MRF181ZR1	800-1000	7.5pep	17	28		32.5	AB	TAPE & REEL PACKAGING (500 UNITS)
MO	MRF182	800-1000	30cw	14	28		58	AB	Obsolete; recommend MRF9030
MO	MRF183	800-1000	45pep	13.5	28	-32	38	AB	Obsolete; recommend MRF9045
MO	MRF183S	800-1000	45pep	13.5	28	-32	38	AB	Not Recommended for New Design
<b>MO</b>	<b>MRF9045</b>	<b>800-1000</b>	<b>45pep</b>	<b>18.8</b>	<b>28</b>		<b>42</b>	<b>AB</b>	<b>unmatched</b>
<b>MO</b>	<b>MRF9045S</b>	<b>800-1000</b>	<b>45pep</b>	<b>18.8</b>	<b>28</b>		<b>42</b>	<b>AB</b>	<b>unmatched</b>
<b>MO</b>	<b>MRF9045M</b>	<b>800-1000</b>	<b>45pep</b>	<b>18.5</b>	<b>28</b>		<b>40</b>	<b>AB</b>	<b>unmatched</b>
MO	MRF184	800-1000	60cw	13.5	28		60	AB	Obsolete; recommend MRF9060
MO	MRF184S	800-1000	60cw	13.5	28		60	AB	Not Recommended for New Design
<b>MO</b>	<b>MRF9002</b>	<b>921-960</b>	<b>2pep</b>	<b>16</b>	<b>26</b>		<b>35</b>	<b>AB</b>	
MO	MRF6522-5R1	921-960	5cw	19	26		55	AB	TAPE & REEL PACKAGING (500 UNITS)
MO	MRF6522-10R1	921-960	10cw	17	26		50	AB	TAPE & REEL PACKAGING (500 UNITS)
<b>MO</b>	<b>MRF9030</b>	<b>921-960</b>	<b>30pep</b>	<b>17</b>	<b>26</b>		<b>40</b>	<b>AB</b>	
<b>MO</b>	<b>MRF9030S</b>	<b>921-960</b>	<b>30pep</b>	<b>17</b>	<b>26</b>		<b>40</b>	<b>AB</b>	
<b>MO</b>	<b>MRF9060</b>	<b>921-960</b>	<b>60pep</b>	<b>17</b>	<b>26</b>		<b>40</b>	<b>AB</b>	
<b>MO</b>	<b>MRF9060S</b>	<b>921-960</b>	<b>60pep</b>	<b>17</b>	<b>26</b>		<b>40</b>	<b>AB</b>	
<b>MO</b>	<b>MRF6522-70</b>	<b>921-960</b>	<b>70cw</b>	<b>16</b>	<b>26</b>		<b>58</b>	<b>AB</b>	
<b>MO</b>	<b>MRF9080</b>	<b>921-960</b>	<b>90pep</b>	<b>17.5</b>	<b>26</b>		<b>58</b>	<b>AB</b>	
<b>MO</b>	<b>MRF9080S</b>	<b>921-960</b>	<b>90pep</b>	<b>17.5</b>	<b>26</b>		<b>58</b>	<b>AB</b>	
MO	MRF185	921-960	85cw	14	28		53	AB	Obsolete; recommend MRF9085
MO	MRF186	921-960	120cw	12	28	-32	35	AB	Obsolete; recommend MRF9120
SF	SL-1010	800-1000	10	15.5	26	-30		A/AB	
SF	SL-3010	800-1000	30	12.5	26	-30		A/AB	
SF	SL-6010	800-1000	60	12.5	26	-30		A/AB	
SF	SL-8010	800-1000	80	10.5	26	-30		A/AB	
SF	SL-12010	800-1000	120			-30			<b>IN DEVELOPMENT</b>
SM	SD56120	470-860	100	13	28		45	AB	
SM	SD56120M	470-860	120	12	28		45	AB	<b>IN DEVELOPMENT</b>
SM	SD57085	800-880	85	15	26		45	AB	<b>IN DEVELOPMENT</b>
SM	SD57170	800-880	170	13	28		45	AB	<b>IN DEVELOPMENT</b>
SM	PD57030	800-945	30	13	28		50	AB	Avail. in straight lead version-add 's' suffix

**LDMOS CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
SM	SD57030/-01	800-945	30	13	28		50	AB	
SM	PD57045	800-945	45	13	28		50	AB	Avail. in straight lead version-add 's' suffix
SM	SD57045/-01	800-945	45	13	28		50	AB	
SM	SD57060/-01	800-945	60	12	28		50	AB	
SM	SD57070	800-960	70	15	26		50	AB	IN DEVELOPMENT
SM	SD57085-02	800-960	85	15	26		50	AB	IN DEVELOPMENT
SM	PD57002	800-960	2	15	28		50	AB	In Development-straight lead version-add 's' suffix
SM	PD57006	800-960	6	15	28		50	AB	In Development-straight lead version-add 's' suffix
SM	PD57018	800-960	18	14	28		50	AB	Avail. in straight lead version-add 's' suffix
SM	SD57120	800-960	120	13	28		50	AB	IN DEVELOPMENT
MO	MHL9838	800-925	8	31	28			A	Amplifier Module
MO	MHL9236	800-960	2.5	30.5	26			A	Amplifier Module
MO	MHL9236M	800-960	2.5	30.5	26			A	Amplifier Module
MO	MHL9128	800-960	1.3	20	28			A	Amplifier Module
MO	MHL9318	860-900	3	17.5	28			A	Amplifier Module
MO	MHVIC910L	921-960	10	22	26			AB	Amplifier Module (LDMOS IC)
MO	MHL8115	40-1000	1	17.5	15			A	Wideband Linear Amplifier Module
MO	MHL8118	40-1000	1	17.5	28			A	Wideband Linear Amplifier Module

**BIPOLARS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
EC	PTB20006	860-900	4	11	25	-25	45	AB	
EC	PTB20005	860-900	15	9	25	-32	50	AB	
EC	PTB20038	860-900	25	9	25		50	AB	
EC	PTB20134	860-900	30	8	25	-30	50	AB	
EC	PTB20004	860-900	50	8	25	-21	50	AB	
EC	PTB20053	860-900	60	8	25		50	AB	
EC	PTB20111	860-900	85	8.5	25	-30	50	AB	
EC	PTB20017	860-900	150	8	25	-28	50	AB	



**BIPOLARS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
EC	PTB20189	900-960	1	12	25		25	A	
EC	PTB20003	915-960	4	11	25	-28	50	AB	
EC	PTB20144	915-960	6	9	25		50	AB	
EC	PTB20181	915-960	6	9	25		50	AB	
EC	PTB20145	915-960	9	9	25		50	AB	
EC	PTB20097	915-960	40	8.5	25		50	AB	
EC	PTB20220	915-960	15	8	25		50	AB	
EC	PTB20105	925-960	20	9	25		50	AB	
EC	PTB20148	925-960	60	8	25		50	AB	
EC	PTB20219	925-960	70	8.5	26	-30	50	AB	
EC	PTB20135	925-960	85	8	26	-30	50	AB	
EC	PTB20177	925-960	150	7.5	26	-28	50	AB	
EC	PTB20171	935-960	25	10	24		50	AB	
MW	PH0810-4	850-960	4	14	24	-30	45	AB	Not recommended for New Design
MW	PH0810-15	850-960	15	12	24	-30	50	AB	Not recommended for New Design
MW	PH0810-35	850-960	35	10	24	-30	55	AB	Not recommended for New Design
MW	PH0810-75	850-960	75	10	26	-28	35	AB	Not recommended for New Design
MW	PH0810-150	850-960	150	10	26	-28	35	AB	Not recommended for New Design
MY	MS1577	860-900	40	6	24			AB	
MY	MS1528	860-900	120	6	24			AB	
MY	MS1578	860-900	150	8	26			AB	
MY	SD1420-01	860-960	0.9	9.5	24			AB	
MY	MS1600	860-960	2.1	9	24			AB	
MY	MS1601	860-960	6	10	24			AB	
MY	MS1451	860-960	15	8	24			AB	
MY	MS1452	860-960	30	7.5	24			AB	
MY	MS1453	860-960	30	7.5	24			AB	
MY	MS1551	860-960	60	7	24			AB	
MY	MS1454	860-960	30	7.5	25			AB	

**BIPOLARS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MY	MS1530	860-960	60	7.5	26			AB	
MY	MS1583	900-960	100	10	26			AB	
MY	MS1529	915-960	100	6	24			AB	
SM	SD1414	800-870	45	4.7	12.5		50	C	
SM	SD1398	860-960	6	10	24		50	AB	
SM	SD1423	860-960	15	8	24		45	AB	
SM	SD1424	860-960	30	7.5	24		45	AB	
SM	SD4017	860-960	30	7.5	25	-35	55	AB	
SM	SD4701	860-960	45	8.5	26			AB	
SM	SD1650	860-960	60	7	24		45	AB	
SM	SD4600	860-960	60	7.5	26		50	AB	
SM	SD4575	800-960	75	8.5	26			AB	
SM	SD1660	860-900	120	6	24	-32	50	AB	
SM	SD4590	800-960	150	8.5	26	-32	35	AB	
SM	SD1680	915-960	100	6	24	-32	45	AB	
SM	SD1414-12	900-960	40	4.3	13.5		50	C	

**MOSFETS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
MW	LF2802A	500-1000	2	10	28		40	AB	
MW	LF2805A	500-1000	5	10	28		50	AB	
MW	LF2810A	500-1000	10	10	28		50	AB	
SB	D2224UK	1-1000	5	7	7.2		50	AB	
SB	D2211UK	1-1000	10	7	7.2		40	AB	
SB	D2225UK	1-1000	5	10	12.5		40	AB	
SB	D2230UK	1-1000	5	10	12.5		40	AB	
SB	D2232UK	1-1000	5	7	12.5		50	AB	
SB	D2253UK	1-1000	5	13	12.5		40	AB	
SB	D2231UK	1-1000	7.5	10	12.5		40	AB	
SB	D2221UK	1-1000	7.5	10	12.5		40	AB	

**MOSFETS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
SB	D2259UK	1-1000	10	10	12.5		40	AB	
SB	D2293UK	1-1000	10	11	12.5		50	AB	
SB	D2294UK	1-1000	15	11	12.5		50	AB	
SB	D2218UK	1-1000	20	10	12.5		40	AB	
SB	D2210UK	1-1000	20	10	12.5		40	AB	
SB	D2229UK	1-1000	2.5	10	12.5		40	AB	
SB	D2029UK	1-1000	2.5	13	28		40	AB	
SB	D2030UK	1-1000	5	13	28		40	AB	
SB	D2031UK	1-1000	7.5	13	28		40	AB	
SB	D1031UK	1-1000	10	13	28		50	AB	
SB	D2010UK	1-1000	20	10	28		40	AB	
SB	D2282UK	500-1000	0.75	8	6		40	AB	
SB	D2081UK	500-1000	0.75	11	12.5		40	AB	
SB	D2201UK	500-1000	2.5	10	12.5		40	AB	
SB	D2219UK	500-1000	2.5	10	12.5		40	AB	
SB	D2202UK	500-1000	5	10	12.5		40	AB	
SB	D2203UK	500-1000	5	10	12.5		40	AB	
SB	D2220UK	500-1000	5	10	12.5		40	AB	
SB	D2212UK	500-1000	10	10	12.5		40	AB	
SB	D2213UK	500-1000	20	10	12.5		40	AB	
SB	D2001UK	500-1000	2.5	13	28		40	AB	
SB	D2019UK	500-1000	2.5	13	28		40	AB	
SB	D2002UK	500-1000	5	13	28		40	AB	
SB	D2003UK	500-1000	5	13	28		40	AB	
SB	D2020UK	500-1000	5	13	28		40	AB	
SB	D2005UK	500-1000	7.5	13	28		40	AB	
SB	D1011UK	500-1000	10	13	28		50	AB	
SB	D1093UK	500-1000	10	13	28		50	AB	
SB	D2004UK	500-1000	10	13	28		40	AB	
SB	D2012UK	500-1000	10	10	28		50	AB	
SB	D2006UK	500-1000	15	13	28		40	AB	
SB	D1016UK	500-1000	20	13	28		50	AB	
SB	D1094UK	500-1000	20	11	28		50	AB	
SB	D2013UK	500-1000	20	10	28		50	AB	

**MOSFETS CONTINUED**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
SB	D2082UK	500-1000	40	8	28		40	AB	
SB	D1053UK	500-1000	50	7.5	28		45	AB	
SB	D2083UK	500-1000	80	8	28		40	AB	
SB	D2084UK	500-1000	100	8	28		40	AB	
SB	D2085UK	500-1000	120	8	28		40	AB	
<b>SM</b>	<b>STM901-30</b>	<b>850-900</b>	<b>30</b>	<b>35</b>	<b>26</b>				<b>Amplifier Module</b>
SM	STM915-16	890-915	16	72	12.5				Amplifier Module
<b>SM</b>	<b>STM961-15B</b>	<b>915-960</b>	<b>15</b>	<b>28</b>	<b>26</b>				<b>Amplifier Module</b>

**PCS/DCS/WLL/GSM/HITS  
TRANSISTORS**

**LDMOS**

Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
EC	PTF10021	1400-1600	30	11	28	-25	48	AB	
EC	PTF10125	1400-1600	135	11.5	28	-30	40	AB	
EC	PTF10045	1600-1650	30	10	28	-28	40	AB	
EC	PTF10112	1800-2000	60	11	28	-30	41	AB	
EC	PTF10153	1800-2000	60	11	28				
EC	PTF10120	1800-2000	120	10	28	-30	40	AB	
EC	PTF10043	1900-2000	12	11	26	-30	45	AB	INPUT MATCHED
EC	PTF10065	1900-2000	30	11.5	28	-30	35	AB	I/O MATCHED
EC	PTF10107	2000	5	11	26	-30	40	AB	
EC	PTF10135	2000	5	11	26	-30	40	AB	
EC	PTF10041	2000	12	10	26	-30	40	AB	~MRF282S
EC	PTF10053	2000	12	10	26	-30	42	AB	~MRF282Z
MO	MRF21010	1800-2170	10pep	12.5	28		32	AB	
MO	MRF18060A	1805-1880	60cw	13	26		45	AB	matched
MO	MRF18060AS	1805-1880	60cw	13	26		45	AB	matched
MO	MRF18085A	1805-1880	85cw	12.5	26		50	AB	
MO	MRF18085AS	1805-1880	85cw	12.5	26		50	AB	
MO	MRF18090A	1805-1880	90cw	13.5	26		52	AB	matched
MO	MRF18090AS	1805-1880	90cw	13.5	26		52	AB	matched
MO	MRF18060B	1930-1990	60cw	13	26		45	AB	matched
MO	MRF18060BS	1930-1990	60cw	13	26		45	AB	matched
MO	MRF18085B	1930-1990	85cw	12.5	26		45	AB	

**LDMOS CONTINUED**

Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
MO	MRF18085BS	1930-1990	85cw	12.5	26		45	AB	
MO	MRF18090B	1930-1990	90cw	13.5	26		45	AB	matched
MO	MRF18090BS	1930-1990	90cw	13.5	26		45	AB	matched
MO	MRF19030	1930-1990	30pep	13	26		36	AB	matched
MO	MRF19030S	1930-1990	30pep	13	26		36	AB	matched
MO	MRF19045	1930-1990	45pep	14	26		37	AB	matched
MO	MRF19045S	1930-1990	45pep	14	26		37	AB	matched
MO	MRF19060	1930-1990	60pep	12.5	26	-31	36	AB	matched
MO	MRF19060S	1930-1990	60pep	12.5	26	-31	36	AB	matched
MO	MRF19085	1930-1990	90pep	12.5	26		37	AB	matched
MO	MRF19085S	1930-1990	90pep	12.5	26		37	AB	matched
MO	MRF19090	1930-1990	90pep	11.5	26	-30	35	AB	matched
MO	MRF19090S	1930-1990	90pep	11.5	26	-30	35	AB	matched
MO	MRF19120	1930-1990	120pep	11.7	26		34	AB	matched (push-pull)
MO	MRF19120S	1930-1990	120pep	11.7	26		34	AB	matched (push-pull)
MO	MRF19125	1930-1990	125pep	12.5	26		35	AB	matched
MO	MRF19125S	1930-1990	125pep	12.5	26		35	AB	matched
MO	MRF281SR1	1930-2000	4pep	12.5	26		33	A, AB	TAPE & REEL PACKAGING (500 UNITS)
MO	MRF281ZR1	1930-2000	4pep	12.5	26		33	A, AB	TAPE & REEL PACKAGING (500 UNITS)
MO	MRF282SR1	1930-2000	10pep	11.5	26	-31	28	A, AB	TAPE & REEL PACKAGING (500 UNITS)
MO	MRF282ZR1	1930-2000	10pep	11.5	26	-31	28	A, AB	TAPE & REEL PACKAGING (500 UNITS)
MO	MRF284	1930-2000	30pep	10.5	26	-32	35	A, AB	unmatched
MO	MRF284SR1	1930-2000	30pep	10.5	26	-32	35	A, AB	TAPE & REEL PACKAGING (500 UNITS)
MO	MRF286	1930-2000	60pep	10.5	26		31	A, AB	matched
MO	MRF286S	1930-2000	60pep	10.5	26		31	A, AB	matched
<b>MO</b>	<b>MRF21010</b>	<b>1930-2000</b>	<b>10</b>	<b>12.5</b>	<b>28</b>	<b>-30</b>	<b>32</b>	<b>AB</b>	
MO	MRF21030	2110-2170	30pep	13	28		33	AB	matched
MO	MRF21030S	2110-2170	30pep	13	28		33	AB	matched
<b>MO</b>	<b>MRF21045</b>	<b>2110-2170</b>	<b>45pep</b>	<b>13.8</b>	<b>28</b>		<b>36</b>		
<b>MO</b>	<b>MRF21045S</b>	<b>2110-2170</b>	<b>45pep</b>	<b>13.8</b>	<b>28</b>		<b>36</b>		
MO	MRF21060	2110-2170	60pep	12.5	28	-30	34	AB	matched
MO	MRF21060S	2110-2170	60pep	12.5	28	-30	34	AB	matched
MO	MRF21085	2110-2170	90pep	12.5	28		36	AB	

**LDMOS CONTINUED**

Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
<b>MO</b>	<b>MRF21085S</b>	<b>2110-2170</b>	<b>90pep</b>	<b>12.5</b>	<b>28</b>		<b>36</b>	<b>AB</b>	
MO	MRF21090	2110-2170	90pep	11.7	28		33	AB	matched
MO	MRF21090S	2110-2170	90pep	11.7	28		33	AB	matched
MO	MRF21120	2110-2170	120pep	11.2	28		34.5	AB	matched (push-pull)
MO	MRF21120S	2110-2170	120pep	11.2	28		34.5	AB	matched (push-pull)
<b>MO</b>	<b>MRF21125</b>	<b>2110-2170</b>	<b>125pep</b>	<b>12</b>	<b>28</b>	<b>-30</b>	<b>34</b>	<b>AB</b>	<b>matched</b>
<b>MO</b>	<b>MRF21125S</b>	<b>2110-2170</b>	<b>125pep</b>	<b>12</b>	<b>28</b>	<b>-30</b>	<b>34</b>	<b>AB</b>	<b>matched</b>
<b>MO</b>	<b>MRF21180</b>	<b>2110-2170</b>	<b>160pep</b>	<b>11.3</b>	<b>28</b>		<b>33</b>	<b>AB</b>	<b>matched (push-pull)</b>
<b>MO</b>	<b>MRF21180S</b>	<b>2110-2170</b>	<b>160pep</b>	<b>11.3</b>	<b>28</b>		<b>33</b>	<b>AB</b>	<b>matched (push-pull)</b>
<b>SF</b>	<b>SL-1020</b>	<b>1800-2000</b>	<b>10</b>	<b>14.5</b>	<b>26</b>	<b>-30</b>		<b>A/AB</b>	
<b>SF</b>	<b>SL-3020</b>	<b>1800-2000</b>	<b>30</b>	<b>10</b>	<b>26</b>	<b>-30</b>		<b>A/AB</b>	
<b>SF</b>	<b>SL-5020</b>	<b>1800-2000</b>	<b>50</b>			<b>-30</b>			
<b>SF</b>	<b>SL-6020</b>	<b>1800-2000</b>	<b>60</b>	<b>10</b>	<b>26</b>	<b>-30</b>		<b>A/AB</b>	
<b>SF</b>	<b>SL-12020</b>	<b>1800-2000</b>	<b>120</b>			<b>-30</b>			
MO	MHW1810-1	1805-1880	10	24	26			AB	Amplifier Module
MO	MHW1810-2	1805-1880	10	32	26			AB	Amplifier Module
<b>MO</b>	<b>MHL19338</b>	<b>1900-2000</b>	<b>4</b>	<b>30</b>	<b>28</b>			<b>A</b>	Amplifier Module
MO	MHW1910-1	1930-1990	10	24	26			AB	Amplifier Module
MO	MHL19936	1900-2000		30	28			A	Amplifier Module

**BIPOLARS**

Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
EC	PTB20179	1800-2000	0.4	8	26			A	
EC	PTB20180	1800-2000	2.5	8	26			AB	
EC	PTB20216	1800-2000	6	8	26		30	AB	
EC	PTB20264	1900-2000	10	8.4	26		40	AB	
EC	PTB20082	1800-2000	10	8	26		30	AB	
EC	PTB20170	1800-2000	30	7	26		38	AB	
EC	PTB20230	1800-2000	45	8.5	26		45	AB	
EC	PTB20175	1900-2000	55	7	26		40	AB	
EC	PTB20125	1800-2000	100	7	26		45	AB	

**BIPOLARS CONTINUED**

Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
GZ	1819AB4	1805-1880	3.2	9.3	25		43	AB	
GZ	1819AB12	1805-1880	12	7.5	25		43	AB	
GZ	1819AB25	1805-1880	25	7	25		43	AB	
GZ	1819AB35	1805-1880	35	8	25		43	AB	
GZ	1819AB60	1805-1880	60	7.3	25		43	AB	
GZ	1920A05	1930-1990	3.2	9.3	25		43	A	
<b>GZ</b>	<b>1920A12</b>	<b>1930-1990</b>	<b>12</b>	<b>7.5</b>	<b>25</b>		<b>43</b>	<b>A</b>	
<b>GZ</b>	<b>1920A20</b>	<b>1930-1990</b>	<b>20</b>	<b>9</b>	<b>25</b>		<b>30</b>	<b>A</b>	
GZ	1920AB4	1930-1990	3.2	9.3	25		43	AB	
GZ	1920AB12	1930-1990	12	7.5	25		43	AB	
GZ	1920AB25	1930-1990	25	7	25		43	AB	
GZ	1920AB35	1930-1990	35	7	25		43	AB	
GZ	1920AB60	1930-1990	60	7.3	25		43	AB	
<b>GZ</b>	<b>1920CD60</b>	<b>1930-1990</b>	<b>60</b>	<b>8.5</b>	<b>25</b>		<b>43</b>	<b>AB</b>	
MW	PH1819-2	1780-1900	2	10	25	-32	35	AB	
MW	PH1819-4N	1780-1900	4	10	26	-30	25	AB	
MW	PH1819-10	1780-1900	10	9	25	-28	40	AB	
MW	PH1819-15N	1780-1900	15	7	26	-30	25	AB	
MW	PH1819-33	1805-1880	33	7	25	-28	40	AB	
MW	PH1819-45	1805-1880	45	8	25		40	AB	
MW	PH1920-33	1930-1990	33	7	25		40	AB	
MW	PH1920-45	1930-1990	45	8	25		40	AB	
MO	MHW1815	1805-1880	15	30	26			AB	Amplifier Module
MO	MHW1915	1930-1990	15	29	26			AB	Amplifier Module



Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
MO	MRF6404	1860-1900	30	8.2	26		43	AB	~TP4035 (matched)
MO	MRF20030R	1800-2000	30	11	26	-30	38	AB	matched
MO	MRF20060R	1800-2000	60	9.8	26	-32	35	AB	matched
MO	MRF20060RS	1800-2000	60	9.8	26	-32	35	AB	matched

**HIGH IMPEDANCE TECHNOLOGY (HITs) - 50 OHM Power Hybrid**

Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	Comment
EC	PTH31043	1800-1900	10	12	28	HIT1819-10 - Old #
EC	PTH31001	1800-1900	35	12	28	HIT1819-35 - Old #
EC	PTH31042	1900-2000	10	12	28	HIT1920-10 - Old #
EC	PTH31002	1900-2000	35	12	28	HIT1920-35 - Old #

Dual Stage

EC	PTH32003	1930-1990	25	24	26	
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These devices are designed for applications requiring linear power amplification in the PCS frequency range.

**3G, WCDMA, UMTS, CDMA2000  
TRANSISTORS**

**LDMOS**

Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
<b>EC</b>	<b>PTF10123</b>	<b>2100-2200</b>	<b>5</b>	<b>11</b>	<b>28</b>				
EC	PTF10119	2100-2200	12	10	28				
<b>EC</b>	<b>PTF10048</b>	<b>2100-2200</b>	<b>30</b>	<b>10</b>	<b>28</b>	<b>-30</b>	<b>40</b>	<b>AB</b>	
<b>EC</b>	<b>PTF10122</b>	<b>2100-2200</b>	<b>50</b>	<b>10</b>	<b>28</b>	<b>-30</b>	<b>35</b>	<b>AB</b>	
<b>EC</b>	<b>PTF10134</b>	<b>2100-2200</b>	<b>100</b>	<b>10</b>	<b>28</b>				
MO	MRF281SR1	1930-2000	4pep	12.5	26		33	A, AB	TAPE & REEL (500 UNITS) matched
MO	MRF281ZR1	1930-2000	4pep	12.5	26		33	A, AB	TAPE & REEL (500 UNITS) matched
MO	MRF282SR1	1930-2000	10pep	11.5	26	-31	28	A, AB	TAPE & REEL (500 UNITS) matched
MO	MRF282ZR1	1930-2000	10pep	11.5	26	-31	28	A, AB	TAPE & REEL (500 UNITS) matched
MO	MRF284	1930-2000	30pep	10.5	26	-32	35	A, AB	unmatched
MO	MRF284SR1	1930-2000	30pep	10.5	26	-32	35	A, AB	TAPE & REEL (500 UNITS) unmatched
MO	MRF286	1930-2000	60pep	10.5	26		31	A, AB	matched
MO	MRF286S	1930-2000	60pep	10.5	26		31	A, AB	matched
MO	MRF21030	2110-2170	30pep	13	28		33	AB	matched
MO	MRF21030S	2110-2170	30pep	13	28		33	AB	matched
<b>MO</b>	<b>MRF21060</b>	<b>2110-2170</b>	<b>60pep</b>	<b>12.5</b>	<b>28</b>	<b>-30</b>	<b>34</b>	<b>AB</b>	<b>matched</b>
<b>MO</b>	<b>MRF21060S</b>	<b>2110-2170</b>	<b>60pep</b>	<b>12.5</b>	<b>28</b>	<b>-30</b>	<b>34</b>	<b>AB</b>	<b>matched</b>
MO	MRF21090	2110-2170	90pep	11.7	28		33	AB	matched
MO	MRF21090S	2110-2170	90pep	11.7	28		33	AB	matched
MO	MRF21120	2110-2170	120pep	11.2	28		34.5	AB	matched (push-pull)
MO	MRF21120S	2110-2170	120pep	11.2	28		34.5	AB	matched (push-pull)
<b>MO</b>	<b>MRF21125</b>	<b>2110-2170</b>	<b>125pep</b>	<b>12</b>	<b>28</b>	<b>-30</b>	<b>34</b>	<b>AB</b>	<b>matched</b>
<b>MO</b>	<b>MRF21125S</b>	<b>2110-2170</b>	<b>125pep</b>	<b>12</b>	<b>28</b>	<b>-30</b>	<b>34</b>	<b>AB</b>	<b>matched</b>
<b>MO</b>	<b>MRF21180</b>	<b>2110-2170</b>	<b>160pep</b>	<b>11.3</b>	<b>28</b>		<b>33</b>	<b>AB</b>	<b>matched (push-pull)</b>
<b>MO</b>	<b>MRF21180S</b>	<b>2110-2170</b>	<b>160pep</b>	<b>11.3</b>	<b>28</b>		<b>33</b>	<b>AB</b>	<b>matched (push-pull)</b>
<b>MO</b>	<b>MHL21336</b>	<b>2110-2170</b>	<b>3</b>	<b>31</b>	<b>26</b>			<b>A</b>	Amplifier Module

**LDMOS CONTINUED**

Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
SF	SL-2522	2000-2200	25	10	26.5	-30		AB	
SF	SL-4522	2000-2200	45	9.5	26.5	-30		AB	
SF	SL-2524	2300-2400	25	10	26.5	-30		AB	
SF	SL-4524	2300-2400	45	8.5	26.5	-30		AB	

**BIPOLARS**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
MY	SD1851	2000	29	8	20			A	
MY	SD1853	2000	31.8	7	20			A	
MY	MSC80064	2000	20.5	9	18			A	
MY	MS3003	2000	24	10	20			A	
MY	MS3006	2000	27	8	20			A	
MY	MS3009	2000	28	7.5	18			A	
MY	MS3011	2000	30	7	18			A	
MY	MS3013	2000	31.7	6	18			A	
MY	MS3014	2000	34	6	18			A	
MY	SD1850	2300	23	11	15			A	
SM	MSC80195	2000	0.75	7.5	18			A	
SM	MSC80185	2000	0.75	7.5	18			A	
SM	MSC80196	2000	1	7	18			A	
SM	MSC80186	2000	1	7	18			A	
SM	MSC80197	2000	1.5	6	18			A	

**WCDMA**

Brand	Part Number	Frequency MHZ	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
EC	PTB20231	2100-2200	18	8	26		40	AB	
EC	PTB20245	2100-2200	35	7.5	26		40	AB	
EC	PTB20235	2100-2200	70	8	26		40	AB	

**PDC, DAB, L-BAND, SATCOM, TELEMETRY, INMARSAT  
TRANSISTORS**

**LDMOS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
EC	PTF10111	1500	6	14	28	-30	55	AB	FLANGE
EC	PTF10021	1400-1600	30	11	28	-30	48	AB	INT. MATCHED

**BIPOLARS**

**PDC/DAB**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
EC	PTB20248	1465-1513	0.7	10	26			A	
EC	PTB20046	1465-1513	1	10.5	26	-23	18	AB	
EC	PTB20249	1465-1513	2.5	9.5	26			AB	
EC	PTB20051	1465-1513	6	8	26		35	AB	
EC	PTB20239	1465-1513	12	8	26		40	AB	
EC	PTB20074	1465-1513	14	7	26	-30	30	AB	
EC	PTB20141	1465-1513	18	8.5	26	-29	45	AB	
EC	PTB20124	1465-1513	40	7	26		50	AB	
EC	PTB20202	1465-1513	125	8	26	-32		AB	
MW	PH1516-2	1450-1550	2	10	25	-32	35	AB	
MW	PH1516-10	1450-1550	10	10	25	-30	40	AB	
MW	PH1516-30	1450-1550	30	10	25	-28	40	AB	
MW	PH1516-60	1450-1550	50	12	26	-28	30	AB	
MW	PH1516-100	1450-1550	100	10	26	-30	30	AB	

**INMARSAT**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
EC	PTB20077	1525-1660	0.7	10	26			A	
EC	PTB20078	1525-1660	2.5	9	26			AB	
EC	PTB20228	1600-1700	6.5	8.5	26		40	AB	
EC	PTB20079	1600-1700	10	9	26		37	AB	
EC	PTB20080	1600-1700	25	9	26		40	AB	

**INMARSAT CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
MO	MRF16030	1600-1640	30	7.5	28		40	C	matched
SM	STM1645-10	1625-1665	10	30	28				Amplifier Module
SM	STM1645-30	1625-1665	30	35	28				Amplifier Module

**SATCOM**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
GZ	16AM08	1600-1700	8	8	22			A	
GZ	1617AM10	1600-1700	10	11	18			A	
GZ	16AM12	1600-1700	12	8	22			A	
GZ	1617AB5	1600-1700	5	10	26			AB	
GZ	1617AB15	1600-1700	15	10	26			AB	
GZ	1617AB35	1600-1700	35	9	25			AB	
MW	PH1617-2	1600-1700	2	10	25	-32	35	AB	
MW	PH1617-4N	1600-1700	4	12	26	-30	35	AB	
MW	PH1617-10	1600-1700	10	10	25	-30	40	AB	
MW	PH1617-12N	1600-1700	13.5	8.5	26	-28	25	AB	
MW	PH1617-30	1600-1700	30	10	25	-28	40	AB	
MY	SD1891	1600-1700	3	10.8	28		40	C	
MY	MS3101	1600-1700	5	14	28		45	C	
MY	SD1893	1600-1700	10	11	28		40	C	
MY	MS3102	1600-1700	10	11	28		48	C	
MY	MS3151	1600-1700	15	9.2	28		45	C	
MY	MS3152	1600-1700	20	9.2	28		48	C	
MY	MS3103	1600-1700	24	9	28		50	C	
MY	SD1868	1600-1700	30	8.8	28		40	C	
MY	MS3153	1500-1700	12	8.5	28		55	C	
MY	MS3154	1500-1700	25	8.5	28		55	C	
MY	MS3155	1600-1700	32	9	28		40	C	
SM	SD1894	1600-1700	4.5	10	28		50	C	
SM	SD1891-03	1600-1700	5	14	28		45	C	

**SATCOM CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	IMD dBc	EFF %	Class	Comment
SM	SD1893-03	1600-1700	10	11	28		40	C	
SM	SD1897	1600-1700	10	11	28		48	C	
SM	SD1895-03	1600-1700	20	9.2	28		48	C	
SM	SD1888-03	1600-1700	24	9	28		50	C	
SM	SD1898	1600-1700	32	9	28		40	C	
SM	SD1899	1600-1700	30	9.3	28		45	C	
SM	AM1517-012M	1620-1660	12	8.5	28		55	C	
SM	AM1517-012S	1625-1675	12	8.5	28		55	C	
SM	AM1517-025M	1620-1660	25	8.5	28		55	C	
SM	AM1517-025S	1625-1675	25	8.5	28		55	C	

**L-BAND**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	EFF %	Class	Pulse Width usec	Duty Cycle %
GZ	1214-30	1215-1400	30	7	28		C	2000	20
GZ	1214-55	1215-1400	55	7	28		C	2000	20
GZ	1214-300	1215-1400	300	8.1	50		C	100	10
SM	AM80814-005	850-1400	5	8.5	28		C		
SM	AM80814-025	850-1400	25	7	35		C		
SM	AM1214-300	1235-1365	270	6.3	50		C		
SM	AM81214-006	1215-1400	5.5	9	28		C		
SM	AM81214-015	1215-1400	14.5	8.6	28		C		
SM	AM81214-030	1215-1400	26	7.2	28		C		
SM	AM81214-060	1215-1400	55	6.6	28		C		
SM	AM1214-100	1215-1400	100	6	28		C		
SM	AM1214-175	1215-1400	160	7.3	40		C		
SM	AM1214-200	1215-1400	200	7	40		C		
<b>SM</b>	<b>AM1214-130</b>	<b>1215-1400</b>	<b>130</b>	<b>8</b>	<b>50</b>		<b>C</b>		
<b>SM</b>	<b>AM1214-250</b>	<b>1215-1400</b>	<b>250</b>	<b>7</b>	<b>50</b>		<b>C</b>		
SM	AM1214-325	1215-1400	325	6.4	50		C		
SM	AM1416-220	1450-1600	200	7	50		C		

**TELEMETRY**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>IMD dBc</b>	<b>EFF %</b>	<b>Class</b>	<b>Comment</b>
GZ	1719-35	1720-1850	35	7.5	28			C	
GZ	1819-35	1750-1850	35	7	28			C	
GZ	2224-12L	2200-2400	12	7.5	22			C	
GZ	2425-25	2410-2470	25	7.5	24			C	
MY	MS3301	1750-1850	28	6.7	28			C	
MY	MS3381	1750-1850	40	7	28			C	
MY	AM82022-020	2000-2150	20	7	22			C	
MY	AM82223-020	2200-2300	20	7	22			C	
MY	MS3382	2200-2300	9	6.5	24			C	
MY	AM82223-018	2200-2300	18	6.5	24			C	
MY	AM82324-020	2300-2400	20	6	22			C	
SM	AM81720-012	1700-2000	12	7.4	24			C	
SM	AM81719-030	1750-1850	28	6.7	28			C	
SM	AM81719-040	1750-1850	40	7	28			C	
SM	AM82223-010	2200-2300	9	6.5	24			C	

**AVIONICS  
(DME, IFF)**

**DME**

**BIPOLARS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Pulse Width usec</b>	<b>Duty Cycle %</b>	<b>Comments</b>
GZ	0912-7	960-1215	7	8.5	50	25	C	10	1	
GZ	0912-25	960-1215	25	8.5	50	45	C	10	1	
GZ	0912-45	960-1215	45	8	50	45	C	10	1	
GZ	DMEG250	960-1215	250	6.2	50	35	C	10	5	
GZ	1002MP	1025-1150	2	9	35	40	C	10	1	
GZ	1004MP	1025-1150	4	9	35	35	C	10	1	
GZ	1015MP	1025-1150	15	10	50	35	C	10	1	
GZ	1035MP	1025-1150	35	10.6	50	45	C	10	1	
GZ	1075MP	1025-1150	75	7.6	50	45	C	10	1	
GZ	DME150	1025-1150	150	7.8	50	40	C	10	1	
GZ	DME375	1025-1150	375	7	50	40	C	10	1	
GZ	DME375A	1025-1150	375	6.5	50	40	C	10	1	
GZ	DME500	1025-1150	500	6	50	35	C	10	1	
GZ	DME700	1025-1150	700	8	50	35	C	10	1	
MO	MRF10005	960-1215	5	8.5	28	55	C			matched
MO	MRF10031	960-1215	30	10	36	45	C			matched
MO	MRF10150	1025-1150	150	10	50	45	C			matched
MO	MRF10350	1025-1150	350	9	50	45	C			matched
MO	MRF10502	1025-1150	500	9	50	45	C			matched
MY	MS2203	1025-1150	0.6	10.8	18		A	CW	CW	
MY	MS2205	1025-1150	4	9	28	35	C	10	1	
MY	SD1526-01	1025-1150	5	9.5	28		C	10	1	
MY	MS2201	1025-1150	2	9	35	35	C	10	1	
MY	MSC1015M	1025-1150	15	10	50	35	C	10	1	
MY	MS2553	1025-1150	35	10.6	50	43	C	10	1	
MY	MSC1090M	1025-1150	90	8.4	50	35	C	10	1	
MY	SD1536-03	1025-1150	90	8.4	50		C	10	1	



DME continued

**BIPOLARS CONTINUED**

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	EFF %	Class	Pulse Width usec	Duty Cycle %	Comments
MY	MSC1150M	1025-1150	150	7.7	50	40	C	10	1	
MY	MSC1175M	1025-1150	175	7.6	50	40	C	10	1	
MY	MSC1250M	1025-1150	250	6.2	50	40	C	10	1	
MY	MS2421	1025-1150	300	6.3	50	35	C	10	1	
MY	MSC1350M	1025-1150	325	6.7	50	40	C	10	1	
MY	MSC1400M	1025-1150	400	6.5	50	40	C	10	1	
MY	MSC1550M	1025-1150	550	5.6	50	35	C	10	1	
SM	MSC1000M	1025-1150	0.6	9	18		A	CW	CW	
SM	MSC1000MP	1025-1150	0.6	9	18		A	10	1	
SM	MSC1004M	1025-1150	4	9	28	35	C	10	1	
SM	MSC1004MP	1025-1150	4	9	28	35	C	10	1	
SM	SD1528-06	1025-1150	15	10	50	30	C	10	1	
SM	SD1528-08	1025-1150	15	10	50	30	C	10	1	
SM	MSC81035M	1025-1150	35	10.6	50	43	C	10	1	
SM	MSC81035MP	1025-1150	35	10.6	50	43	C	10	1	
SM	SD1530-01	1025-1150	35	8	50	30	C	10	1	
SM	SD1530-08	1025-1150	35	8.5	50	30	C	10	1	
SM	SD1534-01	1025-1150	75	7.6	50		C	10	1	
SM	SD1534-08	1025-1150	75	7.4	50		C	10	1	
SM	SD1538-02	1025-1150	150	7.8	50		C	10	1	
SM	SD1538-08	1025-1150	50	7.8	50		C	10	1	
SM	MSC81250M	1025-1150	250	6.2	50	40	C	10	1	
SM	SD1540	1025-1150	300	6.3	50	35	C	10	1	
SM	SD1540-08	1025-1150	300	6.3	50	35	C	10	1	
SM	MSC81325M	1025-1150	325	6.7	50	40	C	10	1	
SM	SD1541-01	1025-1150	400	6.5	50		C	10	1	
SM	MSC81400M	1025-1150	400	6.5	50	40	C	10	1	
SM	SD1542	1025-1150	550	5.6	50		C	10	1	

IFF									
Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	EFF %	Class	Pulse Width usec	Duty Cycle %
GZ	ITC1100	1031	1000	10	50	45	C	1	1
GZ	TPR1000	1090	1000	6	45	43	C	10	1
GZ	TPR175	1090	175	8.5	50	40	C	10	1
GZ	TPR400	1090	400	7.3	50	40	C	10	1
GZ	TPR500	1090	500	5.2	50	35	C	10	1
GZ	TPR500A	1090	500	5.7	50	35	C	10	1
GZ	TPR700	1090	700	7	50	35	C	10	1
MW	PH1090-550S	1090	550	7.5	50	55	C	10	1
MY	MSC1100	1090	95	9.7	40	40	C	10	1
MY	MSC1150M	1090	150	8.7	43	35	C	10	1
MY	SD1527-08	1090	5	11.5	50	35	C	10	1
MY	MSC1300M	1090	300	6.3	50	40	C	10	1
MY	MSC1350M	1090	350	6.9	50	40	C	10	1
MY	MSC1400M	1090	390	6.8	50	35	C	10	1
MY	MS2442	1090	450	7	50	35	C	10	1
MY	MSC1450M	1090	450	7	50	40	C	10	1
MY	MS2473	1090	600	6	50	35	C	10	1
MY	MSC1600M	1090	600	6	50	35	C	10	1
MY	MS2475	1090	720	6.8	50	35	C	10	1
SM	MSC81350M	1090	350	6.9	50	40	C	10	1
SM	SD1541-09	1090	450	7	50		C	10	1
SM	MSC81450M	1090	450	7	50	40	C	10	1
SM	SD1542-04	1090	600	6	50		C	10	1
SM	SD1542-42	1090	600	6	50	35	C	10	1

**AVIONICS  
(JTIDS, TACAN, MODE- S, TCAS)**

<b><u>BIPOLARS</u></b>		<b>JTIDS</b>								
<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Pulse Width usec</b>	<b>Duty Cycle %</b>	<b>Comments</b>
GZ	JTDB25	960-1215	25	7	36	40	C	JTIDS PULSE	BURST	
GZ	JTDA50	960-1215	50	12	36	40	C	JTIDS PULSE	BURST	
GZ	JTDB75	960-1215	75	7	36	40	C	JTIDS PULSE	BURST	
GZ	JTDA150A	960-1215	145	8	36	45	C	JTIDS PULSE	BURST	
MO	MRF10005	960-1215	5	8.5	28	55	C			matched
MO	MRF10031	960-1215	30	10	36	45	C			matched
MO	MRF10150	1025-1150	150	10	50	45	C			matched
MO	MRF10350	1025-1150	350	9	50	45	C			matched
MO	MRF10502	1025-1150	500	9	50	45	C			matched
MY	MS2211	960-1215	6	9.3	28	45	C	JTIDS PULSE	BURST	
MY	MS2212	960-1215	15	8.1	28	45	C	JTIDS PULSE	BURST	
MY	MS2213	960-1215	30	7.8	35	40	C	JTIDS PULSE	BURST	
MY	MS2214	960-1215	85	7.5	35	40	C	JTIDS PULSE	BURST	
MY	MS2215	960-1215	150	7.5	35	45	C	JTIDS PULSE	BURST	
SM	AM80912-005	960-1215	6	9.3	28	45	C	JTIDS PULSE	BURST	
SM	AM80912-015	960-1215	15	8.1	28	45	C	JTIDS PULSE	BURST	
SM	AM80912-030	960-1215	30	7.8	35	40	C	JTIDS PULSE	BURST	
SM	AM80912-085	960-1215	85	7.5	35	40	C	JTIDS PULSE	BURST	
SM	AM0912-150	960-1215	150	7.5	35	45	C	JTIDS PULSE	BURST	

**TACAN**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Pulse Width usec</b>	<b>Duty Cycle %</b>
GZ	TAN15	960-1215	15	7	40	40	C	20	5
GZ	TAN75A	960-1215	75	8	50	40	C	20	5
GZ	TAN150	960-1215	150	7	50	38	C	20	5
GZ	TAN250A	960-1215	250	6.5	50	40	C	20	5
GZ	TAN300	960-1215	300	6.9	50	45	C	10	10
GZ	TAN350	960-1215	350	7	50	35	C	10	10
MY	MS2209	960-1215	90	8.4	50	38	C	10	10
MY	MS2267	960-1215	250	8	50	38	C	10	10
MY	MS2210	960-1215	300	7	50	38	C	10	10
MY	MS2272	960-1215	350	7.6	50	38	C	10	10
SM	AM0912-080	960-1215	90	8.4	50	38	C	10	10
SM	SD8250	960-1215	250	8	50	38	C	20	5
SM	AM0912-300	960-1215	300	7	50	38	C	10	10

**MODE-S**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Pulse Width usec</b>	<b>Duty Cycle %</b>	<b>Comments</b>
GZ	MDS170L	1090	170	7	36	35	C	120	4	
GZ	MDS400	1090	400	6.5	45	35	C	120	2	
GZ	MDS350L	1090	350	8	45	47	C	250	10	
GZ	MDS550L	1090	550	7.8	45	45	C	ELM Burst		
GZ	MDS800	1090	800	8.5	50	40	C	128	2	
MO	MRF10005	960-1215	5	8.5	28	55	C			matched
MO	MRF10031	960-1215	30	10	36	45	C			matched
MO	MRF10150	1025-1150	150	10	50	45	C			matched
MO	MRF10350	1025-1150	350	9	50	45	C			matched
MO	MRF10502	1025-1150	500	9	50	45	C			matched

MODE-S continued

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	EFF %	Class	Pulse Width usec	Duty Cycle %
MW	PH1090-175L	1030-1090	175	8.3	45	55	C	250	10
MW	PH1090-350L	1030-1090	350	8	45	55	C	250	10
MY	MS2223	1090	70	6.7	28	45	C	100	2
MY	MS2230	1090	325	7.7	40	40	C	200	5
SM	AM1011-070	1090	70	6.7	28	45	C	100	2
SM	AM1011-300	1090	300	7.3	36	40	C	200	5
SM	AM1011-075	1090	75	9.2	50	48	C	32	2
SM	AM1011-400	1090	400	8	50	45	C	32	2
SM	AM1011-500	1090	500	8.5	50	40	C	32	2

TCAS

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	EFF %	Class	Pulse Width usec	Duty Cycle %	Comments
GZ	TCS450	1030	450	6.5	45	35	C	32	2	
GZ	TCS600	1030	600	8.7	50	50	C	32	1	
GZ	TCS800	1030	800	8	50	45	C	32	1	
MO	MRF10005	960-1215	5	8.5	28	55	C			matched
MO	MRF10031	960-1215	30	10	36	45	C			matched
MO	MRF10120	960-1215	120	8	36	55	C			matched
MO	MRF10150	1025-1150	150	10	50	45	C			matched
MO	MRF10350	1025-1150	350	9	50	45	C			matched
MO	MRF10502	1025-1150	500	9	50	45	C			matched
MY	MS2229	1090	55	8.7	50	45	C	32	2	
MY	MS2228	1090	75	8.7	50	45	C	32	2	
MY	MS2207	1090	400	8	50	45	C	32	2	
MY	MS2208	1090	500	8.5	50	40	C	32	2	

TCAS continued

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	EFF %	Class	Pulse Width usec	Duty Cycle %	Comments
SM	AM1011-075	1090	75	9.2	50	48	C	32	2	
SM	AM1011-400	1090	400	8	50	45	C	32	2	
SM	AM1011-500	1090	500	8.5	50	40	C	32	2	

**AVIONICS  
(S-BAND)**

**S - BAND**

**BIPOLARS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>EFF %</b>	<b>Class</b>	<b>Pulse Width usec</b>	<b>Duty Cycle %</b>	<b>Comments</b>
MY	MS2606	2700-2900	28	6.5	40	30	C	50	10	
MY	AM82729-060	2700-2900	60	6.6	40	35	C	50	10	
MY	MS2607	2700-2900	125	7	40	35	C	50	10	
MY	MS2601	2700-3100	1	5.2	30	27	C	100	10	
MY	MS2602	2700-3100	3	5.7	30	27	C	100	10	
MY	MS2603	2700-3100	50	12	30	27	C	100	10	
MY	MS2608	2700-3100	12	6	40	30	C	100	10	
MY	MS2604	2700-3100	25	6.2	40	30	C	100	10	
MY	MS2609	2700-3100	50	6	40	30	C	100	10	
MY	MS2619	2900-3100	105	6.2	42	32	C	50	10	
MY	MS2611	3100-3500	1	5.2	30	27	C	100	10	
MY	MS2612	3100-3500	3	5.7	30	27	C	100	10	
MY	MS2613	3100-3500	5	5.2	30	27	C	100	10	
MY	MS2614	3100-3500	10	5	40	30	C	100	10	
MY	MS2615	3100-3500	15	5.2	40	30	C	100	10	
MY	MS2616	3100-3500	30	5.5	40	30	C	100	10	
MY	MS2617	3100-3500	40	5.1	40	30	C	100	10	
MY	MS2618	3100-3500	50	5.2	42	30	C	10	10	
<b>SM</b>	<b>AM2729-110</b>	<b>2700-2900</b>	<b>105</b>	<b>6.5</b>	<b>40</b>	<b>33</b>	<b>C</b>	<b>50</b>	<b>10</b>	<b>In Development</b>

CATV

*Forward Amplifiers*

Brand	Part Number	Frequency MHz	Gain dB	Supply Voltage	Class	Comments
MO	MHW6342T	40-550	34.5	24	A	HYBRID
MO	MHW7182B	40-750	18.5	24	A	HYBRID
MO	MHW7185C	40-750	18.8	24	A	POWER DOUBLING HYBRID
MO	MHW7185CL	40-750	18.5	24	A	POWER DOUBLING HYBRID
MO	MHW7205C	40-750	19.8	24	A	POWER DOUBLING HYBRID
MO	MHW7205CL	40-750	19.5	24	A	POWER DOUBLING HYBRID
MO	MHW7222A	40-750	21.5	24	A	HYBRID
<b>MO</b>	<b>MHW7222B</b>	<b>40-750</b>	<b>21.9</b>	<b>24</b>	<b>A</b>	<b>HYBRID</b>
<b>MO</b>	<b>MHW7242B</b>	<b>40-750</b>	<b>24</b>	<b>24</b>	<b>A</b>	<b>HYBRID</b>
MO	MHW7272A	40-750	27.2	24	A	HYBRID
MO	MHW7292	40-750	29	24	A	HYBRID
MO	CA901	40-860	17	24	A	HYBRID
MO	CA922	40-860	17	24	A	POWER DOUBLING HYBRID
MO	CA922A	40-860	17	24	A	POWER DOUBLING HYBRID
MO	MHW8182B	40-860	18.5	24	A	HYBRID
MO	MHW8185	40-860	18.8	24	A	POWER DOUBLING HYBRID
MO	MHW8185L	40-860	18.5	24	A	POWER DOUBLING HYBRID
MO	MHW8185LR	40-860	18.5	24	A	POWER DOUBLING HYBRID
MO	MHW8185R	40-860	18.8	24	A	POWER DOUBLING HYBRID
MO	MHW8205	40-860	19.8	24	A	POWER DOUBLING HYBRID
MO	MHW8205L	40-860	19.5	24	A	POWER DOUBLING HYBRID
MO	MHW8205R	40-860	19.8	24	A	POWER DOUBLING HYBRID
<b>MO</b>	<b>MHW8222B</b>	<b>40-860</b>	<b>21.9</b>	<b>24</b>	<b>A</b>	<b>HYBRID</b>
<b>MO</b>	<b>MHW8242B</b>	<b>40-860</b>	<b>21.9</b>	<b>24</b>	<b>A</b>	<b>HYBRID</b>
MO	MHW8272A	40-860	27.2	24	A	HYBRID
MO	MHW8292	40-860	29	24	A	HYBRID
<b>MO</b>	<b>MHW9182B</b>	<b>40-1000</b>	<b>18.5</b>	<b>24</b>	<b>A</b>	<b>HYBRID</b>
<b>MO</b>	<b>MHW9242A</b>	<b>40-1000</b>	<b>24</b>	<b>24</b>	<b>A</b>	<b>HYBRID</b>



<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>Class</b>	<b>Comments</b>
SX	PAW583	40-550	13.5	24	A	HYBRID
SX	PAW587	40-550	21	24	A	HYBRID
SX	PAW588	40-550	33.5	24	A	HYBRID
SX	PAW683	40-650	13.5	24	A	HYBRID
SX	PAW688	40-650	33.5	24	A	HYBRID
SX	PAW783	40-750	13.5	24	A	HYBRID
SX	PAW785A	40-750	18	24	A	HYBRID
SX	PAW787	40-750	21	24	A	HYBRID
SX	PAW788	40-750	33.5	24	A	HYBRID
SX	PAW885	40-860	16.5	24	A	HYBRID
SX	PAW887B	40-860	28	24	A	HYBRID
SX	PAW888	40-860	33.5	24	A	HYBRID

***Reverse Amplifiers***

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>Class</b>	<b>Comments</b>
MO	MHW1254L	5-050	25	24	A	LOW CURRENT HYBRID
MO	MHW1304L	5-050	30	24	A	LOW CURRENT HYBRID
MO	MHW1224	5-200	22	24	A	HYBRID
<b>MO</b>	<b>MHW1244</b>	<b>5-200</b>	<b>24</b>	<b>24</b>	<b>A</b>	<b>HYBRID</b>

### AMPLIFIER MODULES

#### LDMOS

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	Class	Comments
MO	MHL9025	790-920	1.5	21.5	15	A	GaAs FET
MO	MHL9838	800-925	8	31	28	A	
MO	MHL9236	800-960	2.5	30.5	26	A	
MO	MHL9236M	800-960	2.5	30.5	26	A	
MO	MHL9318	860-900	3	17.5	28	A	
MO	MHVIC910L	921-960	10	22	26	AB	
MO	MHW1810-1	1805-1880	10	24	26	AB	
MO	MHW1810-2	1805-1880	10	32	26	AB	
MO	MHL19338	1900-2000	4	30	28	A	
MO	MHW1910-1	1930-1990	10	24	26	AB	
MO	MHL19936	1900-2000		30	28	A	
MO	MHL21336	2110-2170	3	31	26	A	

#### BIPOLAR

Brand	Part Number	Frequency MHz	P OUT Watts	Gain dB	Supply Voltage	Class	Comments
MO	MHL8115	40-1000	1	17.5	15	A	WIDEBAND LINEAR AMPLIFIER
MO	MHL8118	40-1000	1	17.5	28	A	WIDEBAND LINEAR AMPLIFIER
MO	MHL9128	800-960	1.3	20	28	A	BASE STATION DRIVERS
MO	MHW1815	1805-1880	15	30	26	AB	BASE STATION
MO	MHW1915	1930-1990	15	29	26	AB	BASE STATION

**MOSFETS**

<b>Brand</b>	<b>Part Number</b>	<b>Frequency MHz</b>	<b>P OUT Watts</b>	<b>Gain dB</b>	<b>Supply Voltage</b>	<b>Class</b>	<b>Comments</b>
<b>SB</b>	<b>LMP1603</b>	<b>150-162</b>	<b>5.5</b>	<b>37.4</b>	<b>7.2</b>		<b>EFF%=38</b>
<b>SB</b>	<b>LMP2003</b>	<b>220-222</b>	<b>5.5</b>	<b>37.4</b>	<b>7.2</b>		<b>EFF%=38</b>
<b>SM</b>	<b>STM901-30</b>	<b>890-900</b>	<b>30</b>	<b>35</b>	<b>26</b>		
SM	STM915-16	890-915	16	72	12.5		
<b>SM</b>	<b>STM961-15B</b>	<b>915-960</b>	<b>15</b>	<b>28</b>	<b>26</b>		
SM	STM1645-10	1625-1665	10	30	28		
SM	STM1645-30	1625-1665	30	35	28		

**Advantages:** Proven technology, Low \$ / Watt, High Power / Chip area & package ratio, Low ESD

Active Semiconductor formed by two P-N junctions whose function is amplification of an electric current. (Emitter, Base, Collector)

<b>CATV</b>	Cable TV (50 to 300 MHz)
<b>C-BAND</b>	(4-8 GHz)
<b>CDMA</b>	Code-Division Multiple Access - A special code is assigned to each signal, allowing a base station to talk with lots of phones at once on the same frequency, and separate them out
<b>Class of Operation</b>	<b>A:</b> Very linear, low distortion, low power for voice, AM, digital modulation schemes <b>AB:</b> Less linear, distortion, very high power <b>C:</b> Non-linear, distortion, very high power
<b>Current (Amps)</b>	Flow of electric charge (electrons)
<b>DBS</b>	Direct Broadcast Satellite (12 GHz)
<b>DME</b>	Distance Measuring Equipment - Used in Avionics
<b>DMOS</b>	Diffused Metal Oxide Semiconductor
<b>DSP</b>	Digital Signal Processor (Baseband)
<b>% Efficiency</b>	$RF\ P_{out} / (RF\ P_{in} + DC\ Power)$
<b>Frequency</b>	Expressed in Hertz (Hz) is cycles/second
<b>GaAs FET</b>	Gallium Arsenide Field Effect Transistor (> 2 GHz)
<b>Gain</b>	$P_{out} / P_{in}$ in dB (Decibels)
<b>GSM</b>	Global System for Mobile Communication
<b>GPS</b>	Global Positioning System (1.5 GHz)
<b>IFF</b>	Identify Friend or Foe - Used in Avionics
<b>L-BAND</b>	Radio Frequency Band of 390 to 1550 MHz
<b>LD MOS</b>	Laterally Diffused Metal Oxide Semiconductor- Using this structure, chips are directly attached to metal flanges to improve grounding and reduce thermal resistance. <b>Advantages:</b> High gain, usable efficiency, low thermal resistance and superior IMD when applied to cellular radio systems.
<b>Output Power</b>	<b>P<sub>out</sub></b>
<b>PCS</b>	Personal Communications Services (1.9 GHz)
<b>PCN</b>	Personal Communications Network (DCS-1800 MHz)
<b>S-BAND</b>	Range of frequency between 2.0 GHz and 4.0 GHz
<b>WLAN</b>	Wireless Local Area Networks

# RF Transistor Worksheet

Date: \_\_\_\_\_ Customer #: \_\_\_\_\_

Customer Name: \_\_\_\_\_

Application: \_\_\_\_\_ Customer P/N: : \_\_\_\_\_

Program Name: \_\_\_\_\_

Frequency: \_\_\_\_\_

Operating Voltage: \_\_\_\_\_

Power In: \_\_\_\_\_

Power Out: \_\_\_\_\_

Power Gain: \_\_\_\_\_

Class of Operation: Class A  Class B  Class AB  Class C

Pulse Conditions:

Efficiency: Collector: \_\_\_\_\_ % Overall: \_\_\_\_\_ %

Temperature Range: \_\_\_\_\_ °C

Package Type: \_\_\_\_\_ Hermetic \_\_\_ Yes \_\_\_ No

Approved Source: \_\_\_\_\_

Competitors P/N: \_\_\_\_\_

Is Circuit Drop In Required? Yes  No

Target/Comp Price: \_\_\_\_\_

Program Life: \_\_\_\_\_

Commercial Screening: \_\_\_\_\_

Engineer: \_\_\_\_\_

Purchasing: \_\_\_\_\_

Potential: \_\_\_\_\_

RF-Micom co.,Ltd

Fax:86-592-5201617

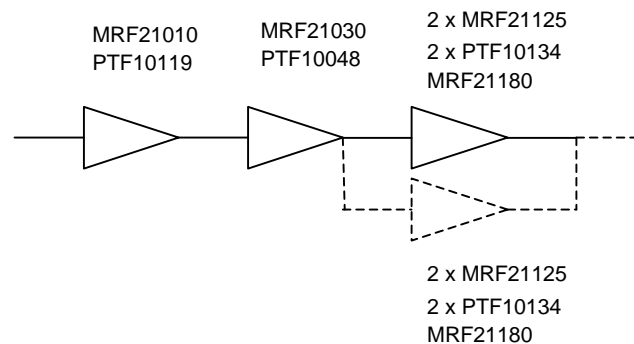
## Hot Markets

The current trend in High Power Applications will continue to be the conversion to Digital Systems.

### 3G

New **3G** cellular designs are currently under way in every region of the world, fueled by the Japanese telecommunications company NTT DoCoMo system rollout in early 2001. High Power RF Transistors in 2.1 – 2.2 GHz frequency range should be in high demand over the next 5 years. Designs using both GaAs FETs and LDMOS technologies will share this market place.

A typical RF building block for this application is a 20W Avg., 200W Peak Power line-up. Most designs will use pre-distortion to increase linearity. The MRF21125 and MRF21180 from Motorola, and PTF10134 from Ericsson are excellent choices for the final stage. See *the 3G tab for more details on the MRF21125, the MRF21180, and the PTF10134*. A complete recommended line-up is:

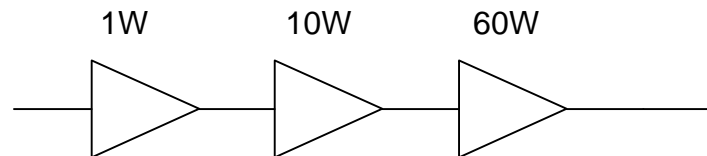


The most popular GaAs FET for this application is the FLL1550 from Fujitsu. Potential customers using this device should be given samples of the LDMOS products that Richardson offers.

## **EDGE**

The European Market will install **EDGE systems (2.5 G)** prior to implementing UMTS (3G). EDGE will be an upgrade in all 3 GSM bands, 900MHz, 1800 MHz & 1900 MHz. These systems will mostly require devices using LDMOS technology due to their superior linearity specifications. Most GSM High Power Amplifiers were originally designed with Bipolar devices; therefore, this is a fantastic opportunity to win new designs.

It is unclear whether customers will apply **Single Channel Amplifiers** or **Multichannel Amplifiers** in their systems. For **Single Channel Amplifiers** the output stage appears to require a 25W Avg, 60W peak power for best efficiency. A recommended line-up is:  
(note: part line-up will vary by frequency band)

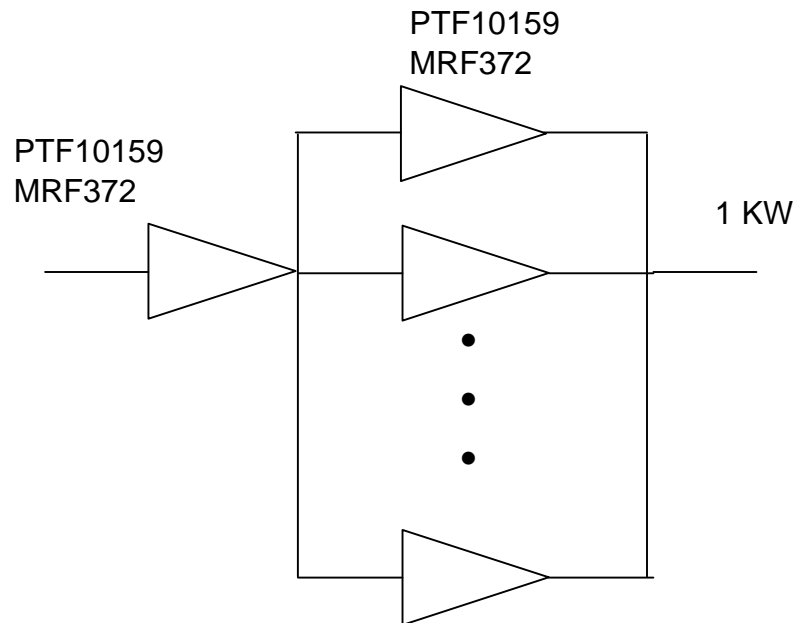


For **Multichannel Amplifiers**, feedforward designs will be the most prominent technology. Motorola MHL series of Class A linear Hybrids are *ideal* for use in Error Amp stages. Once again, each of these is band specific.

## Broadcast

Another market making the move to digital technologies is the **TV transmitters** market. A basic building block in the UHF band will typically reach 1KW peak power. This building block will be replicated and paralleled to reach amplifier peak powers as high as 20KW.

With the high gain provided by LDMOS technologies, many designs drive up to eight paralleled output stages with one driver stage. The Semelab D2020UK & D2082UK are excellent pre-drivers in these systems. *See the UHF tab for more details on the D2020UK & the D2082UK.*



Additionally, the BLF861 from Philips is winning some key designs. Look to attack these designs with the Richardson offering of either the MRF372 or the PTF10159, two of our high power LDMOS devices. *See the UHF-VHF TV Linear tab for more details on the MRF372 and the PTF10159.*

For the remainder of 2000, keep in mind the digital conversion. Digital systems require high linearity, high peak to average ratio and extra circuitry (pre-distortion or feedforward) that all add up to increased \$\$/ Watt.



# EXCESS INVENTORY SALE

BRAND	PART NUMBER	QUANTITY ON HAND (as of 08/14/2000)	PRICE PER UNIT
Microsemi	2N6084	4729	\$10.00
Philips	BLV102	537	\$55.75
Motorola	CA5815CS	299	\$78.00
Semelab	D1020UK	441	\$131.75
M/A-Com	LF2810A	2173	\$35.15
Motorola	MRF175LV	1644	\$49.00
ST Microelectronics	MSC75652	90	\$305.75
M/A-Com	PH1600-7.5	745	\$33.50
Philips	R169	295	\$92.75
ST Microelectronics	SD1466	241	\$115.75
ST Microelectronics	SD4590	7324	\$55.95

***Prices Dramatically Reduced!!!***

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