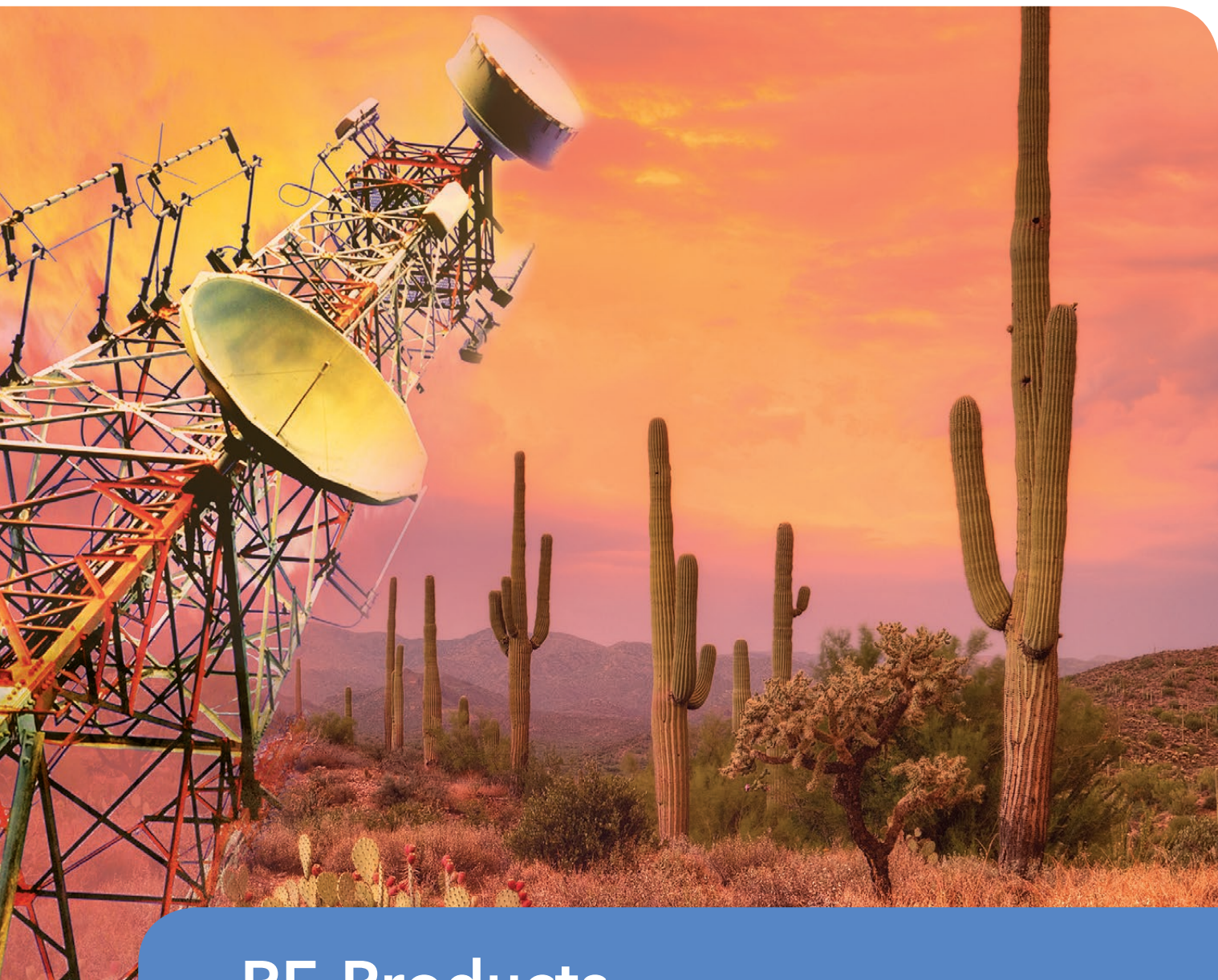




RF Products

Selection Guide



RF Power Product Portfolio

Choose the output power and frequency range needed to meet the design requirements for your end application.

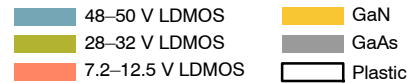
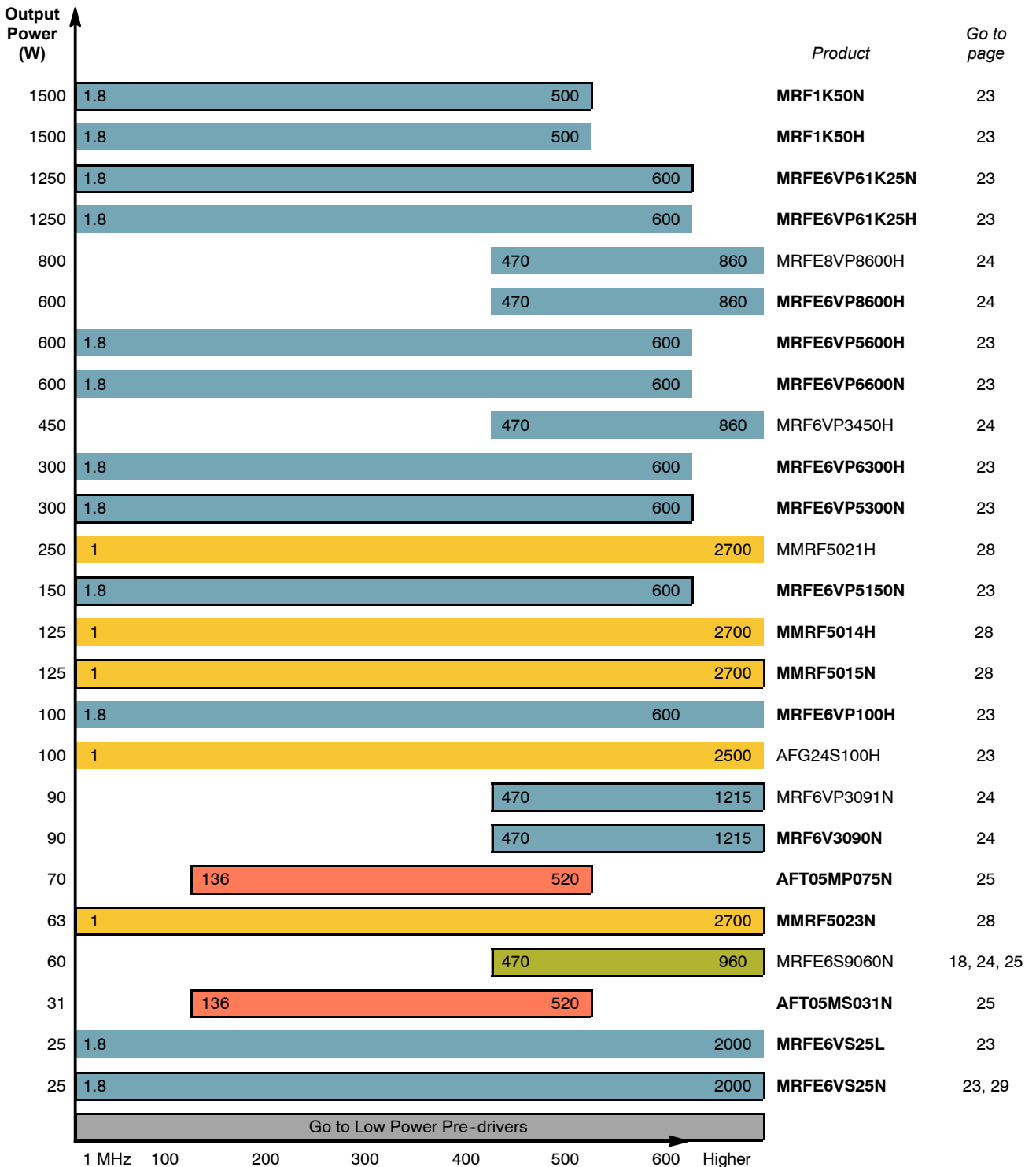


Table 1. RF Power Products — 1–600 MHz



(continued)

Bold = In NXP Product Longevity program

RF Cellular Infrastructure (continued)

Table 2. 1450–2200 MHz (continued)

Product	Frequency Band ⁽³⁾ MHz		P _{out} (Typ) Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
AFT21S232SR3	I/O	2110–2170	50 Avg.	W-CDMA	28	16.7/2110	30.5	0.43	NI-780S-2L
AFT21S240-12SR3	I/O	2110–2170	55 Avg.	W-CDMA	28	20.4/2170	33.9	0.35	NI-880XS-2L2L
A2G22S251-01SR3★	I	1805–2200	48 Avg.	W-CDMA	48	17.7/2170	37.5	1.3	NI-400S-2S
A2T21S260-12SR3★	I/O	2110–2170	65 Avg.	W-CDMA	28	18.7/2170	30.6	0.28	NI-780S-2L2L
AFT21H350W03SR6	I/O	2110–2170	63 Avg.	W-CDMA	28	16.4/2110	47.1	0.49	NI-1230S-4S
AFT21H350W04GSR6	I/O	2110–2170	63 Avg.	W-CDMA	28	16.4/2110	47.1	0.49	NI-1230GS-4L
A2T21H360-23NR6★	I/O	2110–2200	63 Avg.	W-CDMA	28	16.8/2140	49.7	0.19	OM-1230-4L2S
A2T21H360-24SR6	I/O	2110–2170	63 Avg.	W-CDMA	28	16.2/2140	51.8	0.33	NI-1230S-4L2L
A2T21H410-24SR6★	I/O	2110–2170	72 Avg.	W-CDMA	28	15.6/2170	48.9	0.24	NI-1230S-4L2L
A2T21H450W19SR6★	I/O	2110–2200	89 Avg.	W-CDMA	30	15.7/2110	46.1	0.26	NI-1230S-4S4S

Table 3. 2300–2690 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} (Typ) Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
A2I25D012NR1	I	2300–2690	2.2 Avg.	W-CDMA	28	33.2/2690	19.8	3.3	TO-270WB-15
A2I25D012GNR1	I	2300–2690	2.2 Avg.	W-CDMA	28	33.2/2690	19.8	3.3	TO-270WBG-15
AFT20S015NR1	I	1805–2690	1.5 Avg.	W-CDMA	28	17.6/2170	22	4.2	TO-270-2
AFT20S015GNR1	I	1805–2690	1.5 Avg.	W-CDMA	28	17.6/2170	22	4.2	TO-270G-2
MRF6S27015NR1	I	2300–2700	3 Avg.	W-CDMA	28	14/2600	22	2.2	TO-270-2
A2I25D025NR1	I	2100–2900	3.2 Avg.	W-CDMA	28	32.5/2600	20	1.8	TO-270WB-17
A2I25D025GNR1	I	2100–2900	3.2 Avg.	W-CDMA	28	32.5/2600	20	1.8	TO-270WBG-17
MW7IC2725NR1	I/O	2500–2700	4 Avg.	WiMAX	28	28.5/2700	17	1.4	TO-270WB-16
MW7IC2725GNR1	I/O	2500–2700	4 Avg.	WiMAX	28	28.5/2700	17	1.4	TO-270WBG-16
MD7IC2755NR1	I/O	2500–2700	10 Avg.	WiMAX	28	25/2700	25	1.8	TO-270WB-14
MD7IC2755GNR1	I/O	2500–2700	10 Avg.	WiMAX	28	25/2700	25	1.8	TO-270WBG-14
A2I25H060NR1★	I	2300–2690	10.5 Avg.	W-CDMA	28	27.5/2590	40.9	2.2	TO-270WB-17
A2I25H060GNR1★	I	2300–2690	10.5 Avg.	W-CDMA	28	27.5/2590	40.9	2.2	TO-270WBG-17
MRF8P23080HSR3	I/O	2300–2400	16 Avg.	W-CDMA	28	14.6/2300	42	0.89	NI-780S-4L
A2T23H160-24SR3★	I/O	2300–2400	28 Avg.	W-CDMA	28	17.7/2300	48.8	0.49	NI-780S-4L2L
AFT23H160-25SR3★	I/O	2300–2400	32 Avg.	W-CDMA	28	16.7/2300	46.6	0.40	NI-880XS-4L4S
AFT23S160W02SR3	I/O	2300–2400	45 Avg.	W-CDMA	28	17.9/2400	30.3	0.53	NI-780S-2L
AFT23S160W02GSR3	I/O	2300–2400	45 Avg.	W-CDMA	28	17.9/2400	30.3	0.53	NI-780GS-2L
MRF8P23160WHSR3	I/O	2300–2400	30 Avg.	W-CDMA	28	14.1/2320	36.5	0.69	NI-780S-4L
AFT23S170-13SR3	I/O	2300–2400	45 Avg.	W-CDMA	28	18.8/2400	33.9	0.42	NI-780S-2L4S
AFT23H200-4S2LR6	I/O	2300–2400	45 Avg.	W-CDMA	28	15.3/2300	42.8	0.32	NI-1230S-4L2L
AFT23H201-24S ^(2a)	I/O	2300–2400	45 Avg.	W-CDMA	28	16.3/2300	46.2	—	ACP-1230S-4L2L
A2T23H300-24SR6★	I/O	2300–2400	66 Avg.	W-CDMA	28	14.9/2300	46.7	0.25	NI-1230S-4L2L
AFT26HW050SR3	I/O	2496–2690	9 Avg.	W-CDMA	28	14.2/2690	47.1	0.75	NI-780S-4L4S
AFT26HW050GSR3	I/O	2496–2690	9 Avg.	W-CDMA	28	14.2/2690	47.1	0.75	NI-780GS-4L4L
AFT26H050W26SR3	I/O	2496–2690	9 Avg.	W-CDMA	28	14.2/2690	47.1	0.75	NI-780S-4L4L
AFT26P100-4WSR3	I/O	2496–2690	22 Avg.	W-CDMA	28	15.3/2690	43.9	0.60	NI-780S-4L
AFT26P100-4WGSR3	I/O	2496–2690	22 Avg.	W-CDMA	28	15.3/2690	43.9	0.60	NI-780GS-4L
A2T26H160-24SR3	I/O	2496–2690	28 Avg.	W-CDMA	28	16.4/2690	48.1	0.56	NI-780S-4L2L
AFT26H160-4S4R3	I/O	2496–2690	32 Avg.	W-CDMA	28	14.9/2496	45.7	0.41	NI-880XS-4L4S
A2T26H165-24SR3★	I/O	2496–2690	32 Avg.	W-CDMA	28	14.7/2496	45.4	0.45	NI-780S-4L2L
AFT26H200W03SR6	I/O	2496–2690	45 Avg.	W-CDMA	28	14.1/2496	45.2	0.46	NI-1230S-4S
AFT26H250-24SR6	I/O	2496–2690	50 Avg.	W-CDMA	28	14.1/2496	44.6	0.42	NI-1230S-4L2L
AFT26H250W03SR6	I/O	2496–2690	50 Avg.	W-CDMA	28	14.1/2496	44.6	0.42	NI-1230S-4S
A2G26H281-04S ^(2a)	I	2496–2690	50 Avg.	W-CDMA	48	15.3/2635	57	—	NI-780S-4L
A2T26H300-24SR6★	I/O	2496–2690	60 Avg.	W-CDMA	28	14.5/2496	42.5	0.29	NI-1230S-4L2L
MRF8P26080HSR3	I/O	2500–2700	14 Avg.	W-CDMA	28	15.0/2620	36.9	0.88	NI-780S-4L
MRF7S27130HSR3	I/O	2500–2700	23 Avg.	WiMAX	28	16.5/2700	20	0.36	NI-780S-2L

⁽²⁾To be introduced: a) 2Q16; b) 3Q16; c) 4Q16.

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

★New Product

RF Cellular Infrastructure (continued)

Table 4. 3400–3800 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} (Typ) Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
AFT27S006NT1	U	728–3600	0.76 Avg.	W-CDMA	28	22.5/2170	20.2	3.4	PLD-1.5W
AFT27S010NT1	U	728–3600	1.26 Avg.	W-CDMA	28	21.7/2170	22.6	3.5	PLD-1.5W
A2I35H060NR1★	I/O	3400–3800	10 Avg.	W-CDMA	28	24/3400	32.4	1.7	TO-270WB-17
A2I35H060GNR1★	I/O	3400–3800	10 Avg.	W-CDMA	28	24/3400	32.4	1.7	TO-270WBG-17
A2G35S160-01SR3★	I	3400–3600	32 Avg.	W-CDMA	48	15.7/3500	36.7	1.9	NI-400S-2S
A2G35S200-01SR3★	I	3400–3600	40 Avg.	W-CDMA	48	16.1/3500	35.3	1.3	NI-400S-2S

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

★New Product

RF ISM (Industrial, Scientific and Medical) and Broadcast

NXP RF industrial, scientific, medical (ISM) and broadcast RF power transistors are designed to simplify the use of solid-state RF in high-powered ISM applications at frequencies from 1 to 600 MHz. The devices serve applications in the 915, 1300 and 2450 MHz frequency bands and are well-suited for FM radio and VHF and UHF TV broadcast.

Table 1. Wideband GaN — 1–2500 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
AFG24S100HR5★	I	1–2500	100 CW	CW	50	16.3/2500	63	0.86	NI-360H-2SB

Table 2. Wideband LDMOS — 1–2000 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MRFE6VS25NR1	U	1.8–2000	25 CW	CW	50	25.5/512	75.0	1.2	TO-270-2
MRFE6VS25GNR1	U	1.8–2000	25 CW	CW	50	25.5/512	75.0	1.2	TO-270G-2
MRFE6VS25LR5	U	1.8–2000	25 CW	CW	50	25.9/512	74.0	1.4	NI-360H-2L
MRFE6VP100HR5	U	1.8–2000	100 CW	CW	50	27.2/512	70.0	0.38	NI-780H-4L
MRFE6VP100HSR5	U	1.8–2000	100 CW	CW	50	27.2/512	70.0	0.38	NI-780S-4L

Table 3. ISM and Broadcast LDMOS — 1–600 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MRF6V2010NR1	U	1.8–600	10 CW	CW	50	23.9/220	62	3.0	TO-270-2
MRF6V2010GNR1	U	1.8–600	10 CW	CW	50	23.9/220	62	3.0	TO-270G-2
MRFE6VP5150NR1	U	1.8–600	150 CW	CW	50	26.3/230	72	0.21	TO-270WB-4
MRFE6VP5150GNR1	U	1.8–600	150 CW	CW	50	26.3/230	72	0.21	TO-270WBG-4
MRFE6VP5300NR1	U	1.8–600	300 CW	CW	50	25/230	70	0.22	TO-270WB-4
MRFE6VP5300GNR1	U	1.8–600	300 CW	CW	50	25/230	70	0.22	TO-270WBG-4
MRFE6VP6300HR3	U	1.8–600	300 CW	CW	50	25/130	80	0.19	NI-780H-4L
MRFE6VP6300HSR5	U	1.8–600	300 CW	CW	50	25/130	80	0.19	NI-780S-4L
MRFE6VP6300GSR5	U	1.8–600	300 CW	CW	50	25/130	80	0.19	NI-1230GS-4L
MRFE6VP5600HR6	U	1.8–600	600 CW	CW	50	24.6/230	75.2	0.12	NI-1230H-4S
MRFE6VP5600HSR5	U	1.8–600	600 CW	CW	50	24.6/230	75.2	0.12	NI-1230S-4S
MRFE6VP6600NR3	U	1.8–600	600 CW	CW	50	24/98	81	—	OM-780-4L
MRFE6VP6600GNR3	U	1.8–600	600 CW	CW	50	24/98	81	—	OM-780G-4L
MRFE6VP61K25HR5	U	1.8–600	1250 CW	CW	50	22.9/230	74.6	0.15	NI-1230H-4S
MRFE6VP61K25HR6	U	1.8–600	1250 CW	CW	50	22.9/230	74.6	0.15	NI-1230H-4S
MRFE6VP61K25HSR5	U	1.8–600	1250 CW	CW	50	22.9/230	74.6	0.15	NI-1230S-4S
MRFE6VP61K25GSR5	U	1.8–600	1250 CW	CW	50	22.9/230	74.6	0.15	NI-1230GS-4L
MRFE6VP61K25NR6	U	1.8–600	1250 CW	CW	50	22.5/230	72.3	0.06	OM-1230-4L
MRFE6VP61K25GNR6	U	1.8–600	1250 CW	CW	50	22.5/230	72.3	0.06	OM-1230G-4L
MRF1K50H ^(2a)	U	1.8–500	1500 CW	CW	50	22.5/230	74.6	—	NI-130H-4S
MRF1K50N ^(2b)	U	1.8–500	1500 CW	CW	50	22/230	74	—	OM-1230-4L
MRF1K50GN ^(2b)	U	1.8–500	1500 CW	CW	50	22/230	74	—	OM-1230G-4L

⁽²⁾To be introduced: a) 2Q16; b) 3Q16; c) 4Q16.

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

★New Product

RF ISM (Industrial, Scientific and Medical) and Broadcast (continued)

Table 4. UHF Broadcast LDMOS — 470–860 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MRFE6S9060NR1	U	470–860	14 Avg.	N-CDMA	28	21.4/880	32.1	0.88	TO-270-2
MRF6V3090NR1	I	470–1215	18 Avg.	OFDM	50	22/860	28.5	0.79	TO-270WB-4
MRF6V3090NR5	I	470–1215	18 Avg.	OFDM	50	22/860	28.5	0.79	TO-270WB-4
MRF6V3090NBR1	I	470–1215	18 Avg.	OFDM	50	22/860	28.5	0.79	TO-272WB-4
MRF6V3090NBR5	I	470–1215	18 Avg.	OFDM	50	22/860	28.5	0.79	TO-272WB-4
MRF6VP3091NR1	I	470–1215	18 Avg.	OFDM	50	22/860	28.5	0.79	TO-270WB-4
MRF6VP3091NBR1	I	470–1215	18 Avg.	OFDM	50	22/860	28.5	0.79	TO-272WB-4
MRF6VP3450HR6	I	470–860	90 Avg.	OFDM	50	22.5/860	28	0.27	NI-1230H-4S
MRF6VP3450HR5	I	470–860	90 Avg.	OFDM	50	22.5/860	28	0.27	NI-1230H-4S
MRF6VP3450HSR5	I	470–860	90 Avg.	OFDM	50	22.5/860	28	0.27	NI-1230S-4S
MRFE6VP8600HR5	I	470–860	125 Avg.	OFDM	50	19.3/860	30	0.19	NI-1230H-4S
MRFE6VP8600HSR5	I	470–860	125 Avg.	OFDM	50	19.3/860	30	0.19	NI-1230S-4S
MRFE8VP8600HR5	I	470–860	140 Avg.	OFDM	50	20/810	34	0.16	NI-1230H-4S

Table 5. ISM LDMOS — 700–1300 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MRFE6S9060NR1	U	470–860	14 Avg.	N-CDMA	28	21.4/880	32.1	0.88	TO-270-2
MRF8VP13350NR3	I	700–1300	350 CW	CW	50	20.7/915	67.5	0.24	OM-780-4L
MRF8VP13350GNR3	I	700–1300	350 CW	CW	50	20.7/915	67.5	0.24	OM-780G-4L

Table 6. ISM LDMOS — 2400–2500 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MW7IC2425GNR1	I/O	2450	25 CW	CW	28	27.7/2450	43.8	1.2	TO-270WBG-16
MW7IC2425NBR1	I/O	2450	25 CW	CW	28	27.7/2450	43.8	1.2	TO-272WB-16
MRF6S24140HSR3	I/O	2450	140 CW	CW	28	13.2/2450	45	0.29	NI-880S-2L
MRF7S24250NR3	I/O	2400–2500	250 CW	CW	32	15.9/2450	59	0.26	OM-780-2L
MRF24300NR3★	I/O	2400–2500	300 CW	CW	32	13.1/2450	60.5	0.24	OM-780-2L

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

★New Product

RF Mobile Radio and General Purpose Drivers

NXP RF 7.5 and 12.5 V transistors are designed for 2-way handheld and vehicle radios. The broadband performance of the devices makes them ideal as general purpose drivers for ISM and broadcast applications below 1 GHz.

Table 1. 7–12 V LDMOS — 1–1000 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
AFIC901NT1★	U	1.8–1000	1 CW	CW	7.5	31.2/520	73	9.4	QFN 4 × 4, 24L
AFT05MS003NT1★	U	1.8–941	3 CW	CW	7.5	20.8/520	68.3	4.1	SOT-89
AFT05MS004NT1	U	1.8–941	4 CW	CW	7.5	20.9/520	74.9	4.4	SOT-89
AFM906 ^(2b)	U	136–941	6 CW	CW	7.5	20.3/520	70.8	—	DFN 4 × 6
AFT05MS006NT1	U	136–941	6 CW	CW	7.5	18.3/520	73	1	PLD-1.5W
AFT09MS007NT1	U	136–941	7 CW	CW	7.5	15.2/870	71	1.1	PLD-1.5W
AFT09MS015NT1	U	136–941	16 CW	CW	12.5	17.2/941	77	1.0	PLD-1.5W
AFT05MS031NR1	U	136–520	31 CW	CW	13.6/12.5	17.7/520	71.0	0.67	TO-270-2
AFT05MS031GNR1	U	136–520	31 CW	CW	13.6/12.5	17.7/520	71.0	0.67	TO-270G-2
AFT09MS031NR1	U	764–941	31 CW	CW	13.6/12.5	17.2/870	71.0	0.63	TO-270-2
AFT09MS031GNR1	U	764–941	31 CW	CW	13.6/12.5	17.2/870	71.0	0.63	TO-270G-2
AFT09MP055NR1	U	764–941	55 CW	CW	12.5	17.5/870	69	0.32	TO-270WB-4
AFT09MP055GNR1	U	764–941	55 CW	CW	12.5	17.5/870	69	0.32	TO-270WBG-4
AFT05MP075NR1	U	136–520	70 CW	CW	12.5	18.5/520	68.5	0.29	TO-270WB-4
AFT05MP075GNR1	U	136–520	70 CW	CW	12.5	18.5/520	68.5	0.29	TO-270WBG-4
MD8IC970NR1	I/O	850–940	35 Avg.	2-Tone	28	32.6/940	42.1	0.6	TO-270WBL-16
MD8IC970GNR1	I/O	850–940	35 Avg.	2-Tone	28	32.6/940	42.1	0.6	TO-270WBLG-16
MRFE6S9060NR1	U	470–860	14 Avg.	N-CDMA	28	21.4/880	32.1	0.88	TO-270-2
MRF8VP13350NR3	I	700–1300	350 CW	CW	50	20.7/915	67.5	0.24	OM-780-4L
MRF8VP13350GNR3	I	700–1300	350 CW	CW	50	20.7/915	67.5	0.24	OM-780G-4L

⁽²⁾To be introduced: a) 2Q16; b) 3Q16; c) 4Q16.

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

★New Product

RF Military

NXP RF GaN and LDMOS technologies are ideally suited for military applications such as battlefield communications, primary radar covering HF, VHF, UHF, L-Band, S-Band, and avionics (such as IFF transponders) and electronic warfare jamming. The high power and high-gain performance of these devices make them ideal for common-source amplifier applications under demanding conditions.

Table 1. General Purpose Driver ICs

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MMRF2005NR1	I/O	728–960	3.2 Avg.	W-CDMA	28	35.9/940	16.5	1.6	TO-270WB-16
MMRF2005GNR1	I/O	728–960	3.2 Avg.	W-CDMA	28	35.9/940	16.5	1.6	TO-270WBG-16
MMRF2006NT1	I	1805–2170	20 Avg.	W-CDMA	28	32.6/2140	50	1.9	PQFN 8 × 8
MMRF2004NBR1	I/O	2500–2700	25 Avg.	WiMAX	28	28.5/2700	36	1.4	TO-272WB-16
MMRF2007NR1	I/O	136–940	35 Avg.	2-Tone	28	32.6/940	42.1	0.6	TO-270WBL-16
MMRF2007GNR1	I/O	136–940	35 Avg.	2-Tone	28	32.6/940	42.1	0.6	TO-270WBLG-16

Table 2. General Purpose Driver Transistors

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
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28 Volt LDMOS

MMRF1014NT1	U	1–2000	4 Avg.	2-Tone	28	18/1960	43	8.8	PLD-1.5
MMRF1015NR1	U	450–1500	10 Avg.	2-Tone	28	18/960	40	2.85	TO-270-2
MMRF1015GNR1	U	450–1500	10 Avg.	2-Tone	28	18/960	40	2.85	TO-270G-2
MMRF1004NR1	I	2110–2170	10 PEP	2-Tone	28	15.5/2170	36	2.3	TO-270-2
MMRF1004GNR1	I	2110–2170	10 PEP	2-Tone	28	15.5/2170	36	2.3	TO-270G-2
MMRF1315NR1	I/O	500–1000	60 CW	CW	28	20/960	63	0.77	TO-270-2
MMRF1017NR3	I/O	720–960	80 Avg.	W-CDMA	28	20.0/960	36.1	0.31	OM-780-2L

50 Volt LDMOS

MMRF1012NR1	U	10–450	10 CW	CW	50	23.9/220	62	3	TO-270-2
MMRF1304LR5	U	To 2000	25 CW	CW	50	26/512	75	1.4	NI-360-2
MMRF1304NR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270-2
MMRF1304GNR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270G-2
MMRF1305HR5	U	To 2000	100 CW	CW	50	27.2/512	70	0.38	NI-780H-4L
MMRF1305HSR5	U	To 2000	100 CW	CW	50	27.2/512	70	0.38	NI-780S-4L
MMRF1316NR1	I/O	1.8–600	300 CW	CW	50	25/230	70	0.22	TO-270WB-4
MMRF1318NR1	U	10–600	300 CW	CW	50	22/450	60	0.24	TO-270WB-4

Table 3. Radar

Product	Frequency Band ⁽³⁾ MHz		P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
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HF, VHF and UHF Radar

MMRF1012NR1	U	10–450	10 CW	CW	50	23.9/220	62	3	TO-270-2
MMRF1304LR5	U	To 2000	25 CW	CW	50	26/512	75	1.4	NI-360-2
MMRF1304NR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270-2
MMRF1304GNR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270G-2
MMRF1315NR1	I/O	500–1000	60 CW	CW	28	20/960	63	0.77	TO-270-2
MMRF1305HR5	U	To 2000	100 CW	CW	50	27.2/512	70	0.38	NI-780H-4L
MMRF1305HSR5	U	To 2000	100 CW	CW	50	27.2/512	70	0.38	NI-780S-4L
MMRF1020-04NR3	I	720–960	100 Avg.	W-CDMA	48	19.5/920	48.5 ⁽⁴⁾	0.45	OM-780-4L
MMRF1020-04GNR3	I	720–961	100 Avg.	W-CDMA	48	19.5/920	48.5 ⁽⁴⁾	0.45	OM-780G-4L
MMRF1311HR5★	I	470–860	140 Avg.	OFDM	50	20/810	34	0.16	NI-1230H-4S
MMRF1310HR5	U	To 600	300 CW	CW	50	25.0/300	80.0	0.19	NI-780H-4L
MMRF1310HSR5	U	To 600	300 CW	CW	50	25.0/300	80.0	0.19	NI-780S-4L

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

⁽⁴⁾In Doherty circuit.

★New Product

RF Military (continued)

Table 3. Radar (continued)

Product	Frequency Band ⁽³⁾ MHz	P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
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HF, VHF and UHF Radar (continued)

MMRF1316NR1	I/O	1.8–600	300 CW	CW	50	25/230	70	0.22	TO-270WB-4
MMRF1318NR1	U	10–600	300 CW	CW	50	22/450	60	0.24	TO-270WB-4
MMRF1016HR5	U	To 500	600 Peak	OFDM	50	25/225	59	0.2	NI-1230H-4S
MMRF1308HR5	U	To 600	600 CW	CW	50	24.6/230	75.2	0.12	NI-1230H-4S
MMRF1308HSR5	U	To 600	600 CW	CW	50	24.6/230	75.2	0.12	NI-1230S-4S
MMRF1006HR5	U	10–500	1000 Peak	Pulse	50	20/450	64	0.03	NI-1230H-4S
MMRF1006HSR5	U	10–500	1000 Peak	Pulse	50	20/450	64	0.03	NI-1230S-4S
MMRF1306HR5	U	1.8–600	1250 CW	CW	50	22.9/230	74.6	0.15	NI-1230H-4S
MMRF1306HSR5	U	1.8–600	1250 CW	CW	50	22.9/230	74.6	0.15	NI-1230S-4S

L-Band Radar

MMRF1019NR4	I/O	960–1400	10 Peak	Pulse	50	25/1090	69	1.6	PLD-1.5
MMRF1304LR5	U	To 2000	25 CW	CW	50	26/512	75	1.4	NI-360-2
MMRF1304NR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270-2
MMRF1304GNR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270G-2
MMRF1305HR5	U	To 2000	100 CW	CW	50	27.2/512	70	0.38	NI-780H-4L
MMRF1305HSR5	U	To 2000	100 CW	CW	50	27.2/512	70	0.38	NI-780S-4L
MMRF1005HR5	I	1300	250 Peak	Pulse	50	22.7/1300	57.0	0.07	NI-780H-2L
MMRF1005HSR5	I	1300	250 Peak	Pulse	50	22.7/1300	57.0	0.07	NI-780S-2L
MMRF2010NR1★	I	1030–1090	250 Peak	Pulse	50	32.5/1030	59.1	0.15	TO-270WB-14
MMRF2010GNR1★	I	1030–1090	250 Peak	Pulse	50	32.5/1030	59.1	0.15	TO-270WBG-14
MMRF1008HR5	I/O	960–1215	275 Peak	Pulse	50	20.3/1030	65.5	0.08	NI-780H-2L
MMRF1008HSR5	I/O	960–1215	275 Peak	Pulse	50	20.3/1030	65.5	0.08	NI-780S-2L
MMRF1008GHR5★	I/O	960–1215	275 Peak	Pulse	50	20.3/1030	65.5	0.08	NI-780GH-2L
MMRF1011HR5	I/O	1400	330 Peak	Pulse	50	18/1400	60.5	0.13	NI-780H-2L
MMRF1011HSR5	I/O	1400	330 Peak	Pulse	50	18/1400	60.5	0.13	NI-780S-2L
MMRF1009HR5	I/O	960–1215	500 Peak	Pulse	50	19.7/1030	62.0	0.044	NI-780H-2L
MMRF1009HSR5	I/O	960–1215	500 Peak	Pulse	50	19.7/1030	62.0	0.044	NI-780S-2L
MMRF1007HR5	I	965–1215	1000 Peak	Pulse	50	20/1030	56	0.02	NI-1230H-4S
MMRF1007HSR5	I	965–1215	1000 Peak	Pulse	50	20/1030	56	0.02	NI-1230S-4S
MMRF1314HR5★	I/O	1200–1400	1000 Peak	Pulse	52	15.5	46.5	0.018	NI-1230H-4S
MMRF1314HSR5★	I/O	1200–1400	1000 Peak	Pulse	52	15.5	46.5	0.018	NI-1230S-4S
MMRF1314GSR5★	I/O	1200–1400	1000 Peak	Pulse	52	15.5	46.5	0.018	NI-1230GS-4L
MMRF1312HR5★	I/O	900–1215	1200 Peak ⁽⁵⁾	Pulse	52	17.3	54	0.017	NI-1230H-4S
MMRF1312HSR5★	I/O	900–1215	1200 Peak ⁽⁵⁾	Pulse	52	17.3	54	0.017	NI-1230S-4S
MMRF1312GSR5★	I/O	900–1215	1200 Peak ⁽⁵⁾	Pulse	52	17.3	54	0.017	NI-1230GS-4L
MMRF1317HR5★	U	1030–1090	1500 Peak ⁽⁵⁾	Pulse	50	18.9/1030	56	0.019	NI-1230H-4S
MMRF1317HSR5★	U	1030–1090	1500 Peak ⁽⁵⁾	Pulse	50	18.9/1030	56	0.019	NI-1230S-4S

S-Band Radar

MMRF5300NR5★	I	2700–3500	60 Peak	Pulse	50	17/3500	61.5	0.52	OM-270-2
MMRF1013HR5	I/O	2700–2900	320 Peak	Pulse	30	13.3/2900	50.5	0.06	NI-1230H-4S
MMRF1013HSR5	I/O	2700–2900	320 Peak	Pulse	30	13.3/2900	50.5	0.06	NI-1230S-4S

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

⁽⁵⁾P_{out} @ P3dB.

★New Product

RF Military (continued)

Table 4. Radio Communications

Product		Frequency Band ⁽³⁾ MHz	P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
28 Volt GaN									
MMRF5011N ^(2b)	I	1–3000	12 CW	CW	28	13/2500	40	—	OM-270-8
50 Volt GaN									
MMRF5013N ^(2b)	I	1–3000	12 CW	CW	50	15/2700	60	—	OM-270-8
MMRF5019N ^(2b)	I	1–3000	25 CW	CW	50	18/1500	40	—	OM-270-8
MMRF5023N ^(2b)	I	1–2700	63 CW	CW	50	16/2500	40	—	OM-270-2
MMRF5014HR5	I	1–2700	125 CW	CW	50	16/2500	64.2	0.86	NI-360H-2SB
MMRF5015NR5★	I	1–2700	125 CW	CW	50	16/2500	64.2	0.66	OM-270-2
7.5 Volt LDMOS									
MMRF1021NT1	U	136–941	7 CW	CW	7.5	15.2/870	71	1.1	PLD-1.5W
28 Volt LDMOS									
MMRF1024HSR5★	I/O	2496–2690	50 Avg.	W-CDMA	28	14.1/2590	44.6	0.42	NI-1230S-4L2L
MMRF1022HSR5★	I/O	2110–2170	63 Avg.	W-CDMA	28	16.2/2140	51.8	0.33	NI-1230S-4L2L
MMRF1023HSR5★	I/O	2300–2400	66 Avg.	W-CDMA	28	14.9/2350	46.7	0.25	NI-1230S-4L2L
MMRF1315NR1	I/O	500–1000	60 CW	CW	28	20/960	63	0.77	TO-270-2
50 Volt LDMOS — 1–600 MHz									
MMRF1012NR1	U	10–450	10 CW	CW	50	23.9/220	62	3	TO-270-2
MMRF1304LR5	U	To 2000	25 CW	CW	50	26/512	75	1.4	NI-360-2
MMRF1304NR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270-2
MMRF1304GNR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270G-2
MMRF1320NR1★	U	1.8–600	150 CW	CW	50	26.1/230	70.3	0.21	TO-270WB-4
MMRF1320GNR1★	U	1.8–600	150 CW	CW	50	26.1/230	70.3	0.21	TO-270WBG-4
MMRF1310HR5	U	To 600	300 CW	CW	50	25.0/300	80.0	0.19	NI-780H-4L
MMRF1310HSR5	U	To 600	300 CW	CW	50	25.0/300	80.0	0.19	NI-780S-4L
MMRF1318NR1	U	10–600	300 CW	CW	50	22/450	60	0.24	TO-270WB-4
MMRF1016HR5	U	To 500	600 Peak	OFDM	50	25/225	59	0.2	NI-1230H-4S
MMRF1308HR5	U	To 600	600 CW	CW	50	24.6/230	75.2	0.12	NI-1230H-4S
MMRF1308HSR5	U	To 600	600 CW	CW	50	24.6/230	75.2	0.12	NI-1230S-4S
MMRF1306HR5	U	1.8–600	1250 CW	CW	50	22.9/230	74.6	0.15	NI-1230H-4S
MMRF1306HSR5	U	1.8–600	1250 CW	CW	50	22.9/230	74.6	0.15	NI-1230S-4S
50 Volt LDMOS — 450–2000 MHz									
MMRF1304LR5	U	To 2000	25 CW	CW	50	26/512	75	1.4	NI-360-2
MMRF1304NR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270-2
MMRF1304GNR1	U	To 2000	25 CW	CW	50	25.5/512	74.7	1.2	TO-270G-2
MMRF1018NR1	I	470–860	90 CW	CW	50	22.0/860	57	0.79	TO-270WB-4
MMRF1018NBR1	I	470–860	90 CW	CW	50	22.0/860	57	0.79	TO-272WB-4
MMRF1305HR5	U	To 2000	100 CW	CW	50	27.2/512	70	0.38	NI-780H-4L
MMRF1305HSR5	U	To 2000	100 CW	CW	50	27.2/512	70	0.38	NI-780S-4L
MMRF5021H ⁽¹⁾	I	1–2700	250 CW	CW	50	16/2500	58	—	NI-780H-4L
MMRF1020-04NR3	I	720–960	100 Avg.	W-CDMA	48	19.5/920	48.5 ⁽⁴⁾	0.45	OM-780-4L
MMRF1020-04GNR3	I	720–961	100 Avg.	W-CDMA	48	19.5/920	48.5 ⁽⁴⁾	0.45	OM-780G-4L

⁽¹⁾Product under development.

⁽²⁾To be introduced: a) 2Q16; b) 3Q16; c) 4Q16.

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

⁽⁴⁾In Doherty circuit.

★New Product

RF Commercial Aerospace

The NXP RF commercial aerospace portfolio offers LDMOS solutions for avionics systems (ground-based and airborne) and L-Band and S-Band radar applications.

Table 1. Commercial Aerospace — L-Band LDMOS — 960-1400 MHz

Product		Frequency Band ⁽³⁾ MHz	P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MRF6V10010NR4	I/O	960–1400	10 Peak	Pulse	50	25/1090	69	1.6	PLD-1.5
MRFE6VS25NR1	U	To 2000	25 CW	CW	50	25.5/512	75.0	1.2	TO-270-2
MRFE6VS25GNR1	U	To 2000	25 CW	CW	50	25.5/512	75.0	1.2	TO-270G-2
AFIC10275NR1	I	978–1090	250 Peak	Pulse	50	32.6/978	61	0.15	TO-270WB-14
AFIC10275GNR1	I	978–1090	250 Peak	Pulse	50	32.6/978	61	0.15	TO-270WBG-14
MRF6V12250HR5	I/O	960–1215	275 Peak	Pulse	50	20.3/1030	65.5	0.08	NI-780H-2L
MRF6V12250HSR5	I/O	960–1215	275 Peak	Pulse	50	20.3/1030	65.5	0.08	NI-780S-2L
MRF6V14300HR5	I/O	1200–1400	330 Peak	Pulse	50	18/1400	60.5	0.13	NI-780H-2L
MRF6V14300HSR5	I/O	1200–1400	330 Peak	Pulse	50	18/1400	60.5	0.13	NI-780S-2L
MRF6V12500HR5	I/O	965–1215	500 Peak	Pulse	50	19.7/1400	62	0.044	NI-780H-2L
MRF6V12500HSR5	I/O	965–1215	500 Peak	Pulse	50	19.7/1400	62	0.044	NI-780S-2L
MRF6V12500GSR5★	I/O	965–1215	500 Peak	Pulse	50	19.7/1400	62	0.044	NI-780GS-2L
AFV121KHR5★	I/O	960–1215	1000 Peak	Pulse	50	17.4/1090	52.2	0.017	NI-1230H-4S
AFV121KHSR5★	I/O	960–1215	1000 Peak	Pulse	50	17.4/1090	52.2	0.017	NI-1230S-4S
AFV121KGSR5★	I/O	960–1215	1000 Peak	Pulse	50	17.4/1090	52.2	0.017	NI-1230GS-4L
AFV141KHR5★	I/O	1200–1400	1000 Peak	Pulse	50	17.7/1090	52.1	0.018	NI-1230H-4S
AFV141KHSR5★	I/O	1200–1400	1000 Peak	Pulse	50	17.7/1400	52.1	0.018	NI-1230S-4S
AFV141KGSR5★	I/O	1200–1400	1000 Peak	Pulse	50	17.7/1400	52.1	0.018	NI-1230GS-4L

Table 2. Commercial Aerospace S-Band LDMOS — 2700-2900 MHz

Product		Frequency Band ⁽³⁾ MHz	P _{out} Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MRF8P29300HR6	I/O	2700–2900	320 Peak	Pulse	30	13.3/2900	50.5	0.06	NI-1230H-4S
MRF8P29300HSR6	I/O	2700–2900	320 Peak	Pulse	30	13.3/2900	50.5	0.06	NI-1230S-4S

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

★New Product

RF Cooking

NXP is leading a transformation from legacy RF power vacuum device-based systems to long-lasting solid-state transistor-based systems for a wide variety of consumer and commercial cooking applications.

NXP solid-state solutions provide clean, efficient, controllable RF energy while minimizing equipment maintenance and downtime.

Table 1. RF Cooking — 915 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} (Typ) Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MHT1002NR3	I	915	357 CW	CW	48	20.7/915	66.9	0.24	OM-780-4L
MHT1002GNR3	I	915	357 CW	CW	48	20.7/915	66.9	0.24	OM-780G-4L
MHT2001NT1★	I	915	175 CW	CW	50	33.9/915	64.8	0.58	TO-270WB-14

Table 2. RF Cooking — 2450 MHz

Product	Frequency Band ⁽³⁾ MHz		P _{out} (Typ) Watts	Test Signal	V _{DD} Volts	Gain (Typ)/Freq. dB/MHz	Eff. (Typ) %	θ _{JC} °C/W	Packaging
MHT1000HR5	I/O	2400–2500	140 CW	CW	28	13.2/2450	45	0.29	NI-880H-2L
MHT1001HR5	I/O	2400–2500	190 CW	CW	28	13.2/2450	46.2	0.22	NI-1230H-4S
MHT1003NR3	I/O	2400–2500	250 CW	CW	32	15.9/2450	59	0.26	OM-780-2L
MHE1003N	I/O	2400–2500	220 CW	CW	26	14.1/2450	62	0.24	OM-780-2L
MHT1004NR3★	I/O	2400–2500	300 CW	CW	32	15.2/2450	57.9	0.24	OM-780-2L
MHT1004GNR3★	I/O	2400–2500	300 CW	CW	32	15.2/2450	57.9	0.24	OM-780G-2L
MHT1006NT1	U	728–2700	10 CW	CW	28	19.8/2400	55.1	3.7	PLD-1.5W
MHT1008NT1★	U	2400–2500	12.5 CW	CW	28	18.6/2450	56.3	2.6	PLD-1.5W
MHT2000NR1	I/O	2400–2500	25 CW	CW	28	27.7/2450	43.8	1.2	TO-270WB-16
MHT2000GNR1	I/O	2400–2500	25 CW	CW	28	27.7/2450	43.8	1.2	TO-270WBG-16

⁽³⁾U = Unmatched; I = Input; I/O = Input/Output.

★New Product

RF Tape and Reel Specifications (continued)

RF EMBOSSED TAPE AND REEL ORDERING INFORMATION (continued)

Package	Tape Width (mm)	Pitch mm (inch)	Reel Size mm (inch)	Devices Per Reel and Minimum Order Quantity	Device Suffix
OM-1230-4L	56	32.0 ± 0.1 (1.26 ± .004)	330 (13)	150	R6
OM-1230G-4L	56	32.0 ± 0.1 (1.26 ± .004)	330 (13)	150	R6
OM-270-2	24	16.0 ± 0.1 (.631 ± .004)	178 (7)	50	R5
PLD-1.5	16	8.0 ± 0.1 (.315 ± .004)	330 (7)	1,000	T1
	16	8.0 ± 0.1 (.315 ± .004)	330 (7)	100	R4
PLD-1.5W	16	8.0 ± 0.1 (.315 ± .004)	330 (7)	1,000	T1
	16	8.0 ± 0.1 (.315 ± .004)	330 (7)	100	R4
PQFN 5 × 5	16	8.0 ± 0.1 (.315 ± .004)	330 (13)	1,000	T1
PQFN 8 × 8	16	12.0 ± 0.1 (.472 ± .004)	330 (13)	1,000	T1
QFN 3 × 3	12	8.0 ± 0.1 (.315 ± .004)	178 (7)	1,000	T1
QFN 4 × 4	12	8.0 ± 0.1 (.315 ± .004)	330 (13)	1,000	T1
QFN 6 × 6	16	12.0 ± 0.1 (.472 ± .004)	178 (7)	1,000	R1
SOT-89 ⁽¹⁾	12	8.0 ± 0.1 (.315 ± .004)	178 (7)	1,000	T1
SOT-89 ⁽²⁾	12	8.0 ± 0.1 (.315 ± .004)	180 (7)	1,000	T1
SOT-363	8	4.0 ± 0.1 (.157 ± .004)	178 (7)	3,000	T1
TO-270-2	24	16.0 ± 0.1 (.631 ± .004)	330 (13)	500	R1
TO-270G-2	24	12.0 ± 0.1 (.471 ± .004)	330 (13)	500	R1
TO-270WB-4	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WBL-4	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WBG-4	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WB-6A	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WB-14	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WBG-14	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WB-15	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WBG-15	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WBG-16	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WBG-16	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WBL-16	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WBLG-16	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WB-17	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-270WBG-17	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1
TO-272-2	44	20.0 ± 0.1 (.631 ± .004)	330 (13)	500	R1
TO-272WB-4	44	20.0 ± 0.1 (.788 ± .004)	330 (13)	500	R1
TO-272WB-14	44	20.0 ± 0.1 (.788 ± .004)	330 (13)	500	R1
TO-272WB-16	44	20.0 ± 0.1 (.788 ± .004)	330 (13)	500	R1
TO-272WBLG-16	44	24.0 ± 0.1 (.945 ± .004)	330 (13)	500	R1

1. 98ASA10586D

2. 98ASA00241D

Applications and Product Literature

Application Notes of special interest to designers of RF equipment are listed below. This technical documentation is available on the NXP web site.

Application Notes

AN211A	Field Effect Transistors in Theory and Practice	AN1955	Thermal Measurement Methodology of RF Power Amplifiers
AN419	UHF Amplifier Design Using Data Sheet Design Curves	AN1977	Quiescent Current Thermal Tracking Circuit in the RF Integrated Circuit Family
AN423	Field Effect Transistor RF Amplifier Design Techniques	AN1987	Quiescent Current Control for the RF Integrated Circuit Device Family
AN548A	Microstrip Design Techniques for UHF Amplifiers	AN3100	General Purpose Amplifier and MMIC Biasing
AN721	Impedance Matching Networks Applied to RF Power Transistors	AN3263	Bolt Down Mounting Method for High Power RF Transistors and RFICs in Over-Molded Plastic Packages
AN923	800 MHz Test Fixture Design	AN3778	PCB Layout Guidelines for PQFN/QFN Style Packages Requiring Thermal Vias for Heat Dissipation
AN1032	How Load VSWR Affects Non-Linear Circuits	AN3789	Clamping of High Power RF Transistors and RFICs in Over-Molded Plastic Packages
AN1033	Match Impedances in Microwave Amplifiers	AN4005	Thermal Management and Mounting Method for the PLD 1.5 RF Power Surface Mount Package
AN1034	Three Balun Designs for Push-Pull Amplifiers		
AN1526	RF Power Device Impedances: Practical Considerations		
AN1530	Advanced Amplifier Concept Package		
AN1617	Mounting Recommendations for Copper Tungsten Flanged Transistors		
AN1643	RF LDMOS Power Modules for GSM Base Station Application: Optimum Biasing Circuit		
AN1670	60 Watts, GSM 900 MHz, LDMOS Two-Stage Amplifier		
AN1696	Broadband Intermodulation Performance Development Using the Rohde & Schwarz Vector Network Analyzer ZVR		
AN1907	Solder Reflow Attach Method for High Power RF Devices in Over-Molded Plastic Packages		
AN1908	Solder Reflow Attach Method for High Power RF Devices in Air Cavity Packages		
AN1923	Mounting Method with Mechanical Fasteners for the MRF19090 and Similar Packages		
AN1938	Sensitivity of High Power RF Transistors to Source and Output Loads		
AN1949	Mounting Method for the MHVIC910HR2 (PFP-16) and Similar Surface Mount Packages		

Product Literature

BR1610	RF Power Tool System Brochure
BR1611	RF Aerospace and Defense Solutions Brochure
AIRFASTWBFWP	Advances in Freescale Airfast RFICs White Paper
RFLNAWP	Practical Considerations for Low Noise Amplifier Design White Paper
RFPLASTICWP	Designing with Plastic RF Power Transistors White Paper
SG46	RF Product Selector Guide
SMCELLRFPW	Small Cells Call for Scalable Architecture White Paper
50VRFLDMOSWP	50 V RF LDMOS White Paper

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