

NXP's 1500 W RF Power Transistor Sets New Benchmark

April 13, 2016

MRF1K50H



50 V

1.8—500 MHz 1500 W CW

Highlights:

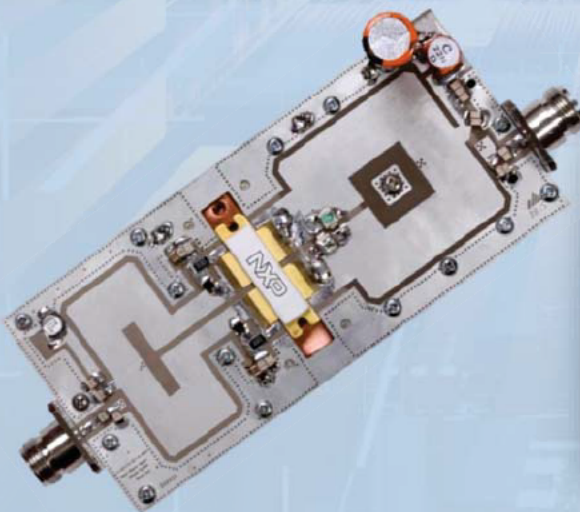
- Industry's most powerful RF transistor in any technology operating at any frequency: 1500W CW @ 50V over 1.8-500 MHz
- Extreme ruggedness: 65:1 VSWR with the best energy absorption on the market
 - 35% more energy absorption than closest competing devices. Ideal for ISM applications
- Pin-compatible with existing solutions: same footprint, same PCB, only light retuning needed (similar output capacitance), enabling fast time-to-market

Target Markets:

- FM broadcast
- VHF TV broadcast
- CO2 laser
- Plasma Generation
- Particle accelerators
- Medical
- Amateur radio
- Material welding

Technical Features:

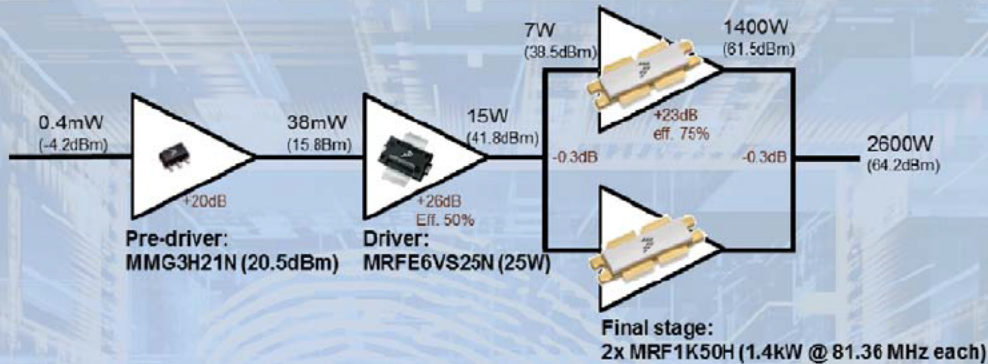
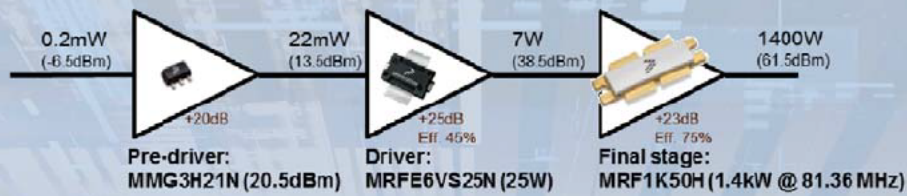
- Unmatched Input and Output
- Push-Pull
- Housed in an NI-1230 air-cavity ceramic package (H version)
- Extreme Ruggedness: 65:1 VSWR
- Product Longevity Program: warranted availability until 2031



Available Reference Circuits:

<u>Board Freq.</u>	<u>Power (W)</u>	<u>Gain (dB)</u>	<u>Drain Eff. (%)</u>
<u>81.36 MHz</u>	1400 CW	23.0	75.0
87.5—108 MHz	TBD CW	TBD	TBD
230 MHz	1500 W	23.5	74.0

Recommended Line-ups



ORDERABLE PART #		IMPORTANT ORDERING INFORMATION
MRF1K50HR5		Available Now
SAMPLES AVAILABLE		

Links and Contacts:

[Product Selector Guide](#)

[Reference Circuit Assembly Request Tool](#)

[Golden Presentation](#)

[Launch Matrix](#)

[Application Notes](#)

[White papers & webinars](#)

[Product Longevity Program](#)

[NXP YouTube Channel](#)

[Twitter-@RFLeonard](#)

RF Multi-Market Contacts:

[Gavin Smith](#) (America)

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