

# VBA250-2500

## 0.01 - 250MHz 2500W Amplifier

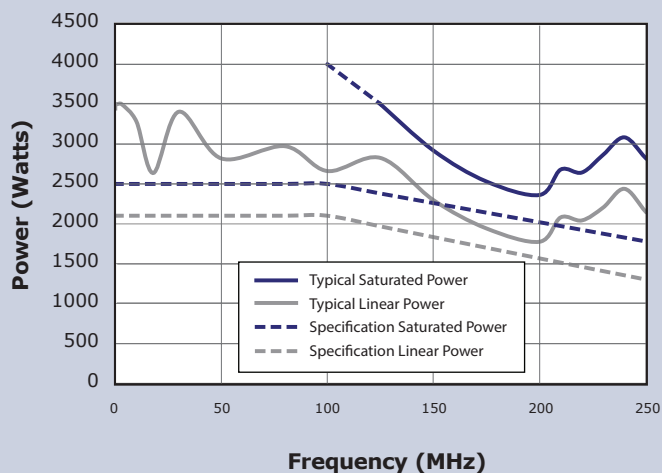
- Robust silicon MOSFET push-pull output design
- High efficiency proprietary combiner design
- Class A for maximum mismatch drive
- General linear power requirements

The **VBA 250-2500** is a member of our family of 10kHz-250MHz high power amplifiers, designed primarily for EMC applications.

Like all our products of the VBA250 series, it is based on high performance silicon push-pull MOSFET output stages. The amplifier utilizes exclusive power combining techniques, minimizing loss for a more efficient solution. The amplifier operates in class A, the benefits for EMC applications being very low distortion and tolerance of 100% mismatch without foldback up to 50% reflection. See overleaf for technical specification.



### Performance Chart



**See overleaf for technical specification**

**Electrical**

<b>Frequency Range (Instantaneous)</b>	10kHz-250MHz
<b>Rated Output Power</b>	2500W 10kHz-100MHz
	2500-1900W 100MHz-250MHz (de-rating slope of 4.8W/MHz)
<b>Output Power at 1dB Gain Compression</b>	2100W 10kHz-100MHz
	2100-1300W 100-250MHz (de-rating slope of 5.33W/MHz)
<b>Gain</b>	64dB Min
<b>Third Order Intercept Point (see note 1)</b>	70dBm
<b>Gain variation with Frequency</b>	±3dB
<b>Harmonics at 1300W Output Power</b>	Better than -20dBc
<b>Output Impedance</b>	50 Ohms
<b>Stability</b>	Unconditional
<b>Output VSWR Tolerance (see note 2)</b>	Infinity any phase
<b>Input VSWR</b>	2:1 (Max)
<b>Supply Voltage</b>	200-240V or 350-415V ac (see options for 3 phase configuration)
<b>Supply Frequency Range</b>	45-63Hz
<b>Supply Power</b>	11kVA
<b>Mains Connector</b>	Appropriate IEC60309 plug (see options)

**Mechanical**

<b>RF Connector Style</b>	Input Type N Female, Output 7/16 Female
<b>Safety Interlock</b>	2 x BNC, S/C and O/C to Mute
<b>USB/GPIB Interface</b>	Standard
<b>Dimensions</b>	34U Rack, 800mm deep
<b>Mass</b>	291kg
<b>Operating Temperature Range</b>	0-40°C
<b>Case Style Options</b>	Rack mount with rear panel connectors

**Regulatory Compliance**

<b>Conducted and Radiated Emissions</b>	EN61326 Class A
<b>Conducted and Radiated Immunity</b>	EN61326:1997 Table 1
<b>Safety</b>	EN61010-1

<b>Options</b>	3 Phase delta connection (No Neutral, 4 pin plug) 3 Phase star connection (With Neutral, 5 pin plug)
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**Notes**

- 1 The third order intercept point is a nominal value, as its calculation depends upon the power level at which distortion measurements are made.
- 2 Output VSWR tolerance is specified for excitation within the permitted levels and frequency range

