



MPA1006 SOLID STATE MEDIUM POWER AMPLIFIER

FEATURES

- Class AB linear GaN design
- Instantaneous wide bandwidth
- Designed for EMI/RFI, lab, and general communication applications
- Suitable for linear CW and all single channel modulation standards
- Built-in protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C, 12VDC

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 6.0 GHz	
Power Output Psat	1.5 Watt Typ	CW
Output Power @ P1dB	1.0 Watt Min	CW
Power Gain	44 dB Min	
Power Gain Flatness	2.0 dB p-p Max	
Input / Output VSWR	2 : 1 Max	Relative to 50 Ohm
3 rd Order Intercept Point	+39 dBm Typ	22dBm/Tone, Δ = 1MHz
Reverse Isolation	50 dB Typ	
Noise Figure	5 dB Typ / 5.5 dB Max	
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	12 VDC Typ	11 - 15 VDC Nom
Current Consumption	1.0 Amp Typ	
Max Input Power Protection	+17 dBm Max	<10 Sec without damage
Load VSWR Protection	∞ : 1	< 1 minute @ rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-55 to +85 °C	
Storage Temperature	-55 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	46.7 x 29.2 x 17 mm	Excluding connectors
Weight	100 gr.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	Feed Thru	
Cooling	External Heatsink	Base plate -30 to +70 °C



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OUTLINE DRAWING