



MPA1091 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

- Class AB GaAs linear design
- Instantaneous wide Bandwidth
- Suitable for CW, Pulse and all single channel modulation standards
- Built-in protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 18.0 GHz	
Power Output Psat	1 Watt Min	CW
Power Output P1dB GCP	27 dBm Min - 28 dBm Max	CW
Gain @ P1dB GCP	26 dB Min - 29 dB Max	
Power Gain Flatness	2 dB p-p Max	
Gain Variation Over Temperature	±1.5 dB Max	
Input Return Loss	10 dB Min	Relative to 50 Ohm
Harmonics	-20 dBc Typ	At rated Pout
Noise Figure	6 dB Max	
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	12 - 15 VDC	
Current Consumption	1.2 Amp Max	At rated Pout
Max Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Max	< 1minute @ rated Pout
AM/PM	3 Deg/dB Max	Any Freq. across bandwidth

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +70 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	50 x 28 x 10 mm	Excluding Connectors
Weight	TBD	
RF Connectors In/Out	SMA female	Cover Flange
DC Power	Feed Thru	
Mounting Holes	4 Nos., M 2.5 through holes	
Sealing	Hermetic	

PIN ASSIGNMENT

Pin	Function	Description
1	DC Voltage	+15VDC
2	GND	GND

OUTLINE DRAWING

Atten: +2.6V ~ -0.8V, 20dB range

