

MPA1005 SOLID STATE MID POWER AMPLIFIER

FEATURES

Class AB GaAs linear design
Designed for medium power instantaneous ultra-wide Bandwidth
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	0.2 - 20.0GHz	
Power Output Psat	2 Watt Min	CW
Power Output P1dB GCP ²	1.0 Watt Typ	CW
Small Signal Gain	33 dB Min	
Power Gain Flatness	5 dB p-p Max	
Input Return Loss	-10 dB Max	
Harmonics	-20 dBc Typ	At rated Pout
Noise Figure ²	6 dB Max	
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	15 VDC ±0.2V	
Current Consumption	1.9 Amp Max	At rated Pout
Input Power Protection	+3 dBm Max	<10 Sec without damage
Load VSWR Protection ¹	5 : 1 Max	<1 minute at rated Pout

Notes:

1: Load VSWR must be maintained below 5:1 at all times.

2: Reduced performance at 0.2-1.0GHz

ENVIRONMENTAL CHARACTERISTICS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	140 x 90 x 22 mm	Excluding connectors
Weight	-	
RF Connectors In/Out	Hi-Freq. SMA female	
DC Power	Feed Thru	
Cooling	External Heatsink	Forced air required

PIN ASSIGNMENT

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

OUTLINE DRAWING

