



MPA5013A SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB GaAs design
 Instantaneous wide Bandwidth
 Built-in protection circuits
 High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	17.0 - 18.0 GHz	
Power Output P1dB	23 dBm Min	CW
Small Signal Gain	30 dB Min	
Power Gain Flatness	1 dB p-p Max	
Input / Output Return Loss	10 dB Min	
Harmonics	-20 dBc Max	At rated Pout
Noise Figure	10 dB Max	
3 rd Order Intercept	34 dBm Typ	Design Goal
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	9.0 VDC ±0.2 V	
Current Consumption	1.5 Amp Max	At rated Pout
Max Input Power	+3 dBm Max	<10 Sec without damage
Load VSWR	5 : 1 Max	<1 minute @ rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	70 x 60 x 15mm	Excluding connectors
Weight	TBD	
RF Connectors In/Out	SMA female	Cover Flange
DC Power / Interface Connector		
Cooling	External Heatsink	Forced air required

PIN ASSIGNMENT

Pin	Function	Description
1	DC Voltage	+9VDC
2	GND	GND

OUTLINE DRAWING

