



The MP270/500/44MK-A is a broadband high power amplifier for VHF-UHF applications. This amplifier supports signal amplification in the 20 ~ 512 MHz frequency band and is protected against over-temperature and excessive current draw.

Model: MP270/500/44MK-A

1. Electrical Characteristics

Item	Value	Note
Frequency Range	20 ~ 512 MHz	
Gain	44 dB (Min.)	
Gain Flatness	±1.5 (Max.)	Over Frequency Range
VVA Range	25 dB (Min.)	
Output P1	+44 dBm (Min.)	
Output Psat	+45 dBm (Min.)	
Input / Output VSWR	2:1 (Max.)	
Spurious	-60 dBc (Max.)	
Efficiency	20% (Typ.)	Pout @ 25 Watts
2 nd /3 rd Harmonics	-35/-10 dBc (Typ.)	Pout @ 20 Watts
HPA Enable / Disable	TTL "0V or Open" ⇒ Enable TTL "5V" ⇒ Disable	
Temperature Sensor Output	10 mV / °C	
Current Sensor Output	275 mV / A	
HPA Switching ON/OFF Speed	2 μs	
DC Input Voltage	+28 V	
Current Consumption	5A (Max.)	Pout @ 20 Watts
Input / Output Impedance	50 Ω	
Max. Input Signal (Without Damage)	+5 dBm	

2. Mechanical Characteristics

Monitoring Connector	DB-9 Male	4 – 40 screw
RF IN/OUT Connector	SMA 4 Holes Female	
DC Input	Pin 6 and Pin 7 @ DB-9	
Dimensions	6.4" x 3.4" x 1.06"	

3. Environment Characteristics

Operating Temperature	-40°C ~ +70°C	Base Plate
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Revision History

REV	Reason to Change	Date	Initialed by
	Production Approved	09/01/14	Y.Z.

4. DB9 Pin Description

1	N/C	
2	Current Monitor	275 mV / A
3	Temperature Monitor	10 mV / °C
4	VVA Control	0-5V 0V: Gain Max. 5V: Gain Min.
5	Enable / Disable	0V or Open: Enable 5V: Disable
6, 7	+28 V	
8, 9	GND	

5. Outline Drawing

