



The MP60/80/45MK-A is a broadband high power amplifier for VHF-UHF applications. This amplifier supports signal amplification in the 20-100 MHz frequency band and is protected against over-temperature.



## Model: MP60/80/45MK-A

### 1. Electrical Characteristics

Item	Value	Note
Frequency Range	20 ~ 100 MHz	
Gain	45 dB (Min.)	
Gain Flatness	± 0.5 (Max.)	Over Frequency Range
VVA Range	25 dB (Min.)	
Output P1	+44.8 dBm (Min.)	
Output Psat	+46 dBm (Min.)	
Input / Output VSWR	2:1 (Max.)	
Spurious	-60 dBc (Max.)	
Efficiency	> 20 %	Pout @ 30 Watts
2 <sup>nd</sup> /3 <sup>rd</sup> Harmonics	-25/-10 dBc (Typ.)	Pout @ 30 Watts
HPA Enable / Disable	TTL "0V or Open" ⇒ Enable TTL "5V" ⇒ Disable	
Temperature Sensor Output	10 mV / °C	
Current Sensor Output	100 mV / A	
HPA Switching ON/OFF Speed	2 μs	
DC Input Voltage	+28 V	
Current Consumption	5A (Max.)	Pout @ 30 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 Released	01/15/14	Y.Z.

### 4. DB9 Pin Description

1	N/C	
2	Current Monitor	100 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

