



The MP941/35/47MK-A6 is suitable for broadband high power linear applications. The amplifier employs linear LDMOS power devices that provide sufficient output power, wide dynamic range, and high gain.

**Model: MP941/35/47MK-A6**

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	925 ~ 960 MHz	
Gain	50 ± 1 dB	
Gain Flatness	± 0.5 dB	Over Freq. Range
Gain Variation	± 1 dB	Over Temp. Range
Output Power P1	+47 dBm (Min.)	
Output Power Psat	+ 48 dBm (Min.)	
ACLR @ +43 dBm	- 25 dBc @ ± 5 MHz offset from F0 (Max.) (RBW = 30 kHz)	<b>Signal Source:</b> Measured with 2 WCDMA, 3.5 MHz Spacing, Total PAR 8.5 dB
Input / Output VSWR	≤ 1.5	Output Isolator Included
Harmonics	-45 dBc (Max.)	
Spurious	-70 dBc (Max.)	
HPA Enable/Disable	TTL "0V or Open" : Enable TTL "5V" : Disable	
VVA Control	+5V: Maxim Gain 0V: Maxim Attenuation	
VVA Range	>25 dB	
Forward Power Monitor	2.4 ± 0.1 V @ +43 dBm	RMS Detection
Reverse Power Monitor	2.4 ± 0.1 V @ +43 dBm	RMS Detection
Temperature Sensor	Vt + 500mV, 10mV/C°	
Current Sensor	10mV/100mA	
DC Input Voltage / Current	+28 VDC ± 1V / 2.8A	DC Input Voltage / Current Pout @ +43 dBm
Thermal Shutdown	+85°C ± 5°C	Auto Recover @ +70°C ± 5°C
Input / Output Impedance	50 Ω	
Input Max without Damage	+25 dBm	With ALC on

2. Mechanical Characteristics		
Monitoring Connector	DB-9 Male	4 – 40 screw
RF IN/OUT Connector	SMA 4 Holes – Female	
DC Input	Pin 6,7 on DB-9	
Dimensions	6.4" x 3.4" x 1"	

Revision History			
REV	Reason to Change	Date	Initialed by

3. Environment Characteristics		
Operating Temperature	-20°C ~ +70°C	Base Plate

4. DB9 Pin Description		
1	Forward Power Monitor	
2	Reverse Power Monitor	
3	Temperature Sensor	
4	VVA Control	0-5V
5	Enable / Disable	Enable: TTL Low or Open Disable: TTL High
6, 7	+28V	
8	Current Sensor	10mV/100mA
9	Ground	

**5. Outline Drawing**

