



The MP940/35/47MK-A7 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: MP940/35/47MK-A7

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	925 ~ 960 MHz	
Gain	50 ± 1dB	
Gain Flatness	± 0.5 dB	Over Freq. Range
Gain Variation	± 1dB	Over Temp. Range
Output Power P1	+ 47 dBm (Min.)	
Output Power Psat	+ 48 dBm (Min.)	
Output 3 <sup>rd</sup> Intercept Point	+ 60 dBm	2 tones @ +40 dBm output power, 1 MHz Spacing
Input / Output VSWR	≤ 1.2	Output Isolator Included
Harmonics	-40 dBc (Max.)	
Spurious	-70 dBc (Max.)	
HPA Enable/Disable	- 5V : Enable + 5V : Disable	Pin 5
VVA Control	+ 5V: Maxim Gain 0V: Maxim Attenuation	
VVA Range	>25 dB	
Forward Power Monitor	2.4 ± 0.1 V @ + 47 dBm	RMS Detection
Reverse Power Monitor	2.4 ± 0.1 V @ + 47 dBm	RMS Detection
DC Input Voltage / Current	+28 VDC ± 1V / 4.4A	DC Input Voltage / Current @ Pout +47 dBm CW
Thermal Alarm	> +65°C : +5V < +65°C : -5V	Pin 3
Input / Output Impedance	50 Ω	
Input Max 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 6,7 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	Thermal Alarm	> +65°C : +5V < +65°C : -5V
4	VVA Control	0-5V
5	Enable / Disable	-5V : Enable +5V : Disable
6, 7	+28V	
8, 9	Ground	

### 5. Outline Drawing

