



The MP940/35/47MK-A11 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-A11



1. Electrical Characteristics

Item	Value	Note
Frequency Range	925 ~ 960 MHz	
Gain	50 ± 1dB	
Gain Flatness	± 0.75 dB	Over Freq. Range
Gain Variation	± 1dB	Over Temp. Range
Output Power P1	+47 dBm (Min.) +48 dBm (Typ.)	
Output Power Psat	+ 48.5 dBm (Min.) +49 dBm (Typ.)	
Output 3 rd Intercept Point	+ 59 dBm	2 tones @ +40 dBm output power, 1 MHz Spacing
Input / Output VSWR	≤ 1.2	Output Isolator Included
Harmonics	-45 dBc (Max.)	
Spurious	-70 dBc (Max.)	
HPA Enable/Disable	TTL "0V or Open" : Enable TTL "5V" : Disable	
Forward Power Monitor	2.4 ± 0.1 V @ +47 dBm	RMS Detection
Reverse Power Monitor	2.4 ± 0.1 V @ +47 dBm	RMS Detection
Input Power Monitor	2.4 ± 0.1 V @ +20 dBm	RMS Detection
Current Sensor	10mV/100mA	
DC Input Voltage / Current	+28 VDC ± 1V / 4.5A	DC Input Voltage / Current @ +47 dBm
Thermal Shutdown	+85°C ± 5°C	Auto Recover @ +70°C ± 5°C
Input / Output Impedance	50 Ω	
Input Max Without Damage	+15 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 0.93"	

Revision History			
REV	Reason to Change	Date	Initialed by
	Initial Release	02/16/16	YZ

3. Environment Characteristics

Operating Temperature	-20°C ~ +70°C	Base Plate
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4. DB9 Pin Description

1	Forward Power Monitor	
2	Reverse Power Monitor	
3	Input Power Monitor	
4	NC	
5	Enable / Disable	Enable: TTL Low or Open Disable: TTL High
6, 7	+28V	
8	Current Sensor	10mV/100mA
9	Ground	

5. Outline Drawing

