



The MP940/35/37MK-A8 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: MP940/35/37MK-A8

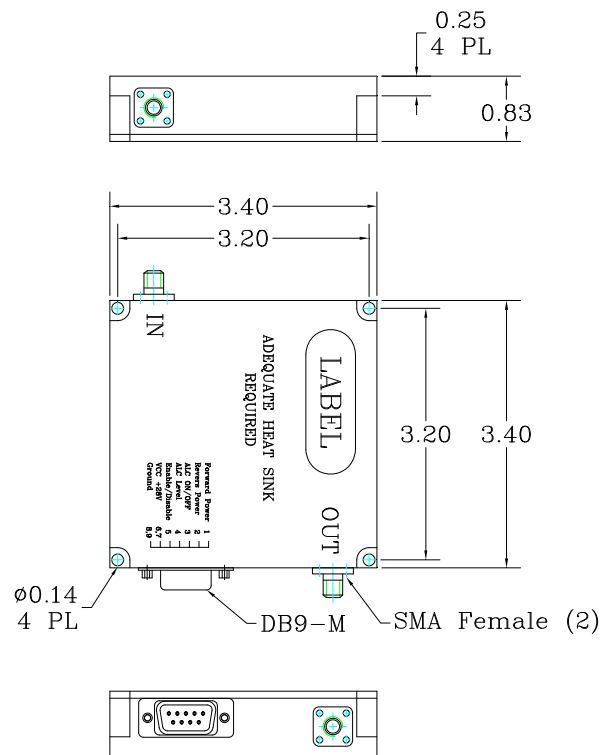
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1. Electrical Characteristics		
Item	Value	Note
Frequency Range	925 ~ 960 MHz	
Gain	37 ± 1dB	
Gain Flatness	± 1.0dB	Over Freq. Range
Gain Variation	± 1dB	Over Temp. Range
Output Power P1	+37 dBm (Typ.)	
Output Power Psat	+39 dBm (Min.)	
Output 3 rd Intercept Point	+ 49 dBm	2 tones @ +30 dBm output power, 1 MHz Spacing
ACLR @ +37 dBm	- 30 dBc @ ± 200 KHz offset from F0 (Max.) (RBW = 30 kHz)	Signal Source: 1 GSM
	-55dBc @ ± 400 KHz offset from the F0 (Max.) (RBW = 30 kHz)	
Input / Output VSWR	≤ 1.5	
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 @ +37 dBm	RMS Detection
Reverse Power Monitor	2.4 ± 0.1 V @ +37 dBm	RMS Detection
Current Sensor	10mV/100mA	
DC Input Voltage / Current	+28 VDC ± 1V / 0.5A	DC Input Voltage / Current @ +37 dBm
Thermal Shutdown	+85°C ± 5°C	Auto Recover @ +70°C ± 5°C
Input / Output Impedance	50 Ω	
Load Mismatching Tolerance	∞ :1	Isolator Included
Input Max Power (without damage)	+25 dBm	

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

4. DB9 Pin Description		
1	Forward Power Monitor	
2	Reverse Power Monitor	
3	NC	
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



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	3.4" x 3.4" x 0.83"	

Revision History			
REV	Reason to Change	Date	Initialed by
	Output Isolator Added, Obsolete GaN device replaced by LDMOS device with similar efficiency.	12/04/17	Y.Z.