



The **MP4000/4G/41MK-A1** is a broadband and high power amplifier for 2000 ~ 6000 MHz frequency band. The amplifier employs advanced GaN power devices that provide ample output power, good gain flatness over specified band, a wide dynamic range, and high efficiency.



Model: MP4000/4G/41MK-A1

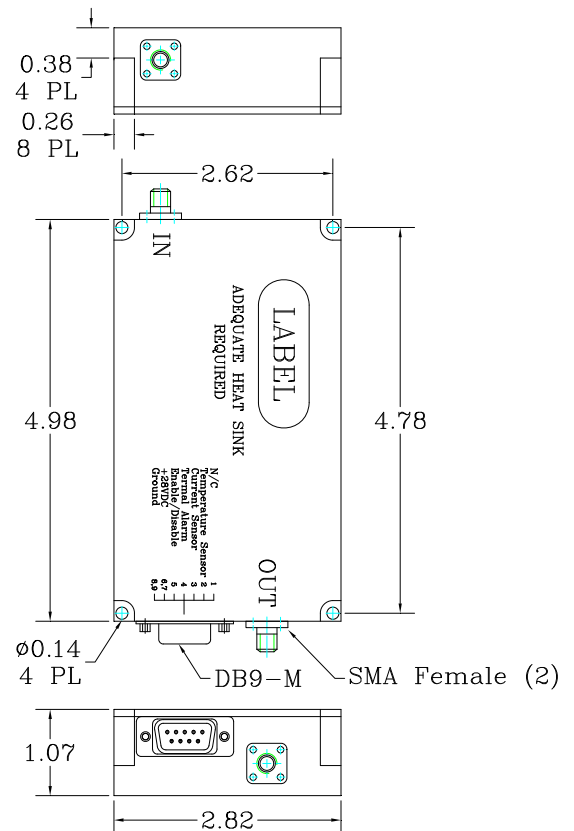
1. Electrical Characteristics		
Item	Value	Note
Frequency Range	2000 ~ 6000 MHz	
Gain	40 dB (Min.)	Pout @ +41 dBm
Gain Flatness	± 2.0 dB (Typ.)	Over Freq. Range
Output Power Psat	+41.5 dBm (Min.)	
Input VSWR	≤ 2.0	
Harmonics	-12 dBc (Max.)	Pout @ +41 dBm
Spurious	-70 dBc (Max.)	Pout @ +41 dBm
HPA Enable/Disable	TTL "Low" ⇒ Enable TTL "High or Open" ⇒ Disable	Pin 5 on DB-9
DC Input Voltage / Current	+28 VDC ± 2V / 2.8 A	Pout @ +41 dBm
Thermal Alarm	+80°C ± 5°C TTL Low: Normal TTL High: Alarm	Pin 4
Current Sensor	100 mV/Amp	Pin 3
Temperature Sensor	Vt + 500mV, 10mV/°C	Pin 2
Input / Output Impedance	50 Ω	
Load Mismatch Tolerance	5:1	No Damage
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 6,7 on DB-9	
Dimensions	4.98" x 2.82" x 1.07"	
Weight	1.0 lb	

3. Environment Characteristics		
Operating Temperature	-20°C ~ +80°C	Base Plate
Operating Altitude	30,000 Feet	
Cooling	External Heatsink	
Humidity (Non-condensing)	95% (Max.)	

4. DB9 Pin Description		
1	NC	
2	Temperature Sensor	Vt + 500mV, 10mV/°C
3	Current Sensor	100 mV/Amp
4	Thermal Alarm	TTL Low: Normal TTL High: Alarm
5	Enable / Disable	Enable: TTL Low Disable: TTL High or Open
6, 7	+28VDC	
8, 9	GND	

5. Outline Drawing



Revision History			
REV	Reason to Change	Date	Initialed by
	Production Approved	11/21/17	Y.Z