



The **MP4000/4G/37MK-CP-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. The product integrates a bi-directional coupler for monitoring Forward and Reverse Power.



Model: MP4000/4G/37MK-CP-A1

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	2000 ~ 6000 MHz	
Gain	38 dB (Min.)	
Gain Flatness	± 2.0 dB (Typ.)	Over Freq. Range
Output Power Psat	+37 dBm (Min.)	
Input VSWR	≤ 1.5	
Harmonics	-15 dBc (Max.)	Pout @ +37 dBm
Spurious	-70 dBc (Max.)	Pout @ +37 dBm
HPA Enable/Disable	TTL “Low” ⇒ Enable TTL “High or Open” ⇒ Disable	
Forward Power Monitor	3.0 ± 0.2 V @ +37 dBm Detection Flatness: ± 2.0 dB	RMS Detection, Pin 6
Reverse Power Monitor	3.0 ± 0.2 V @ +37 dBm Detection Flatness: ± 2.0 dB	RMS Detection, Pin 5
DC Input Voltage / Current	+28 VDC ± 2V / 0.8A (Max.)	Pout @5 Watts
Thermal Shutdown	+85°C ± 5°C	Auto Recover @ +70°C ± 5°C
Input / Output Impedance	50 Ω	
Input Max without Damage	+5 dBm	

4. DB9 Pin Description		
1	GND	
2	NC	
3	+28VDC	
4	Enable / Disable	Enable: TTL Low Disable: TTL High or Open
5	Reverse Power Detection	
6	Forward Power Detection	
7, 8, 9	NC	

2. Mechanical Characteristics		
Monitoring Connector	DB-9-Male	4 – 40 screw
RF IN/OUT Connector	SMA 4 Holes – Femal	
DC Input	Pin 3 on DB-9	
Dimensions	6.4” x 2.98” x 1”	

3. Environment Characteristics		
Operating Temperature	-20°C ~ +70°C	Base Plate
Operating Altitude	15000 Feet (Min.)	
Cooling	External Heatsink	
Humidity (Non-condensing)	95% (Max.)	

Revision History			
REV	Reason to Change	Date	Initialed by

5. Outline Drawing

