



The **MP5000/1G/300K-A2** is a broadband driving amplifier for 4500-5500 MHz frequency band. It is suitable for Jamming or communication operation. The amplifier employs advance GaAs MEFET devices that provide a wide dynamic range, broadband, and high efficiency.



## Model: MP5000/1G/300K-A2

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	4500 ~ 5500 MHz	
Gain	33 dB (Min.)	Pin 4 Vag = 0V
Gain Flatness	± 0.7 dB (Typ.)	
Gain Variation	± 0.35 dB	10°C Change
Output Power P1	+30.0 dBm (Min.)	
Output Power Psat	+31.0 dBm (Typ.)	
Input VSWR	2:1 (Max.)	
Noise Figure	12 dB (Max.)	At +25°C Pin 4 Vag = 0V
VVA Control Voltage/Current	0 ~ 5V/ 1mA 0V: Maximum Gain 5V: Minimum Gain	Pin 4
VVA Control Range (Vag)	30 dB (Min.)	Linear in dB
Enable/Disable Control Voltage/Current	TTL High: +3 ~ 5V TTL Low : 0 ~ 0.8V Current : 0.5 mA (Max.)	
Enable/Disable	TTL "High or Open": Enable TTL "Low": Disable	Pin 5 on DB-9
Isolation in Disable Mode	50 dB (Min.)	Pin 5 TTL Low
DC Input	+15 VDC	
DC Current	0.9 A (Max.)	
In/Output Impedance	50 Ω	
Max. Input without Damage	+15 dBm	

2. Mechanical Characteristics		
RF IN/OUT Connector	SMA Female	
DC Input	Pin 6, 7 on DB-9	
Dimensions	3.3" x 5.0" x 0.85"	
Weight	0.6 lb	

3. Environment Characteristics		
Operating Temperature	-20°C ~ +70°C	Base Plate
Storage Temperature	-40°C ~ +85°C	
Cooling	External Heatsink	
Humidity (Non-condensing)	95% (Max.)	

Revision History			
REV	Reason to Change	Date	Initialed by

4. DB9-Male Pin Description		
1 ~ 3	NC	
4	VVA Control	0V: Maximum Gain 5V: Minimum Gain
5	Enable/Disable	Enable: TTL High or Open Disable: TTL Low
6 ~ 7	+15 VDC	
8 ~ 9	GND	

## 5. Outline Drawing

