



The MP1500/2000/200K-A1 is a broadband driving amplifier for 500-2500 MHz frequency band. It is suitable for Jamming or communication operation. The amplifier employs advance E-pPHEM devices that provide a wide dynamic range, broadband, and high efficiency.

## Model: MP1500/2000/200K-A1



### 1. Electrical Characteristics

Item	Value	Note
Frequency Range	500 ~ 2500 MHz	
Gain	22 ± 1.5 dB	Pin 25 Vag = 0V
Power Gain Flatness	± 0.5 dB (Max.)	
Gain Variation	± 1.0 dB (Max.)	Over Temperature
Output Power P1	+20.0 dBm (Min.) +22 dBm (Max.)	Over Temperature
Output Power Psat	+21.0 dBm (Min.)	
Input VSWR	1.5:1 (Max.)	
Noise Figure	10 dB (Max.)	At Pin 25°C Pin 25 Vag = 0V
VVA Control Voltage/Current	0 ~ 5V/ 1mA 0V: Maximum Gain 5V: Minimum Gain	Pin 25
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 12 on DB-25
Isolation in Disable Mode	60 dB (Min.)	Pin 12 TTL Low
DC Input	+15 VDC	
DC Current	0.15 A (Max.)	
In/Output Impedance	50 Ω	
Max. Input without Damage	+20 dBm	

### 2. Mechanical Characteristics

RF IN/OUT Connector	SMA Female	
DC Input	Pin 23 on DB-25	
Dimensions	3.3" x 5.0" x 0.85"	
Weight	0.75 lb	

### 3. Environment Characteristics

Operating Temperature	-25°C ~ +75°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
A	Specs reflect actual performance.	03/28/14	Y.Z.
B	Gain Flatness improved.	07/16/14	G.D.

### 4. DB25-Male Pin Description

1 ~ 7	NC	
8,9	GND	
10	GND	
11	NC	
12	Enable/Disable	Enable: TTL High or Open Disable: TTL Low
13	GND	
14 ~ 20	GND	
21~23	+15 VDC	
24	GND	
25	VVA Control	0V: Maximum Gain 5V: Minimum Gain

### 5. Outline Drawing

