



The MP3500/200/43MK-A1 is suitable for 3.5 GHz high power, linear applications, and supports Wi-Max & LTE. The amplifier is designed for both TDD & FDD modulations. This amplifier employs linear GaN power devices that provide ample output power, wide dynamic range, and excellent gain flatness..



Model: MP3500/200/43MK-A1

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	3400 ~ 3600 MHz	
Operating Bandwidth	200 MHz	
Gain	45 dB (Min.)	20 Watts Output
Gain Flatness	± 1.0 dB (Max.)	Over Freq. Range
Output Psat	+43 dBm (Min.)	CW Power
Reverse Power Handling	+43 dBm (Min.)	CW Power
Pulse Rise/Fall Time	100 nS (Max.)	Pulse Signal : PW: 4 ~ 20 µsec DC: up to 33%
Pulse Drop @ 10 watts Pulse Power Output	0.2 dB (Max.)	Pulse Signal : PW: 4 ~ 20 µsec DC: up to 33%
Input / Output VSWR	1.5:1 dB (Max.)	
Output VSWR	Isolator Included	
Noise Figure	8 dB (Max.)	
Harmonics	-30 dBc (Max.)	@ Rated Power
Spurious	-70 dBc (Max.)	@ Rated Power
HPA Enable / Disable	TTL "0V" or " Short to GND" ⇒ Enable TTL "5V" or "Open" ⇒ Disable	
Switching On/Off 90% Rise/Fall Time	≤ 1µs	
Switching On/Off Delay	≤ 2µs	
Forward Power Monitor	2.4 ± 0.1V @ +40 dBm	Peak Detection @ Pin 1
Reverse Power Monitor	2.4 ± 0.1V @ +40 dBm	Peak Detection @ Pin 2
Over Temperature Shutdown	+85°C ± 5°C	Auto Recover @ +70°C ± 5°C
DC Input Voltage / Current	+28VDC ± 1V / 1.4A (Max.)	DC Input Voltage / Current @ CW Pout +40 dBm
MAX CW Input Without Damage	+20 dBm	
Input / Output Impedance	50 Ω	
DC Input Protection	With Voltage Limit Diode	

Revision History			
REV	Reason to Change	Date	Initialed by
A	Physical dimensions reduced.	3/21/14	Y.Z.

2. Mechanical Characteristics		
Monitoring Connector	DB-9 Male	4 – 40 screw
RF INPUT Connector	SMA Female	
RF OUTPUT Connector	SMA Female	
DC Input	DB-9 Male	Pin 8, 9
Dimensions	6.5" x 4.4" x 1.05"	

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

4. DB9 Pin Description		
1	Forward Power Monitor	0 – 2.4 V
2	Reverse Power Monitor	0 – 2.4 V
3, 4	N/C	
5	Enable / Disable	Enable: TTL Low Disable: TTL High
6, 7	GND	
8, 9	+28 VDC	

5. Outline Drawing

