



The MP5775/100/44MK-A1 is suitable for 5.725 ~ 5.825 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. Band Pass and Low Pass filters are included into the module to improve Selectivity and Harmonic responses.



Model: MP5775/100/44MK-A1

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	5725 ~ 5825 MHz	
Frequency Response	Pass Band: 100 MHz (Min.)	
	Rejection: 250 MHz Offset from 5775 MHz 60 dBc (Min.), 65 (Typ.)	
Gain	64 dB (Min.)	25 Watts Output
Gain Flatness	± 1.0 dB (Max.)	Over Pass Band Frequency Range
Output Psat	+44 dBm (Min.)	
Reverse Power Handling	+43 dBm (Min.)	
Input VSWR	1.5:1 dB (Max.)	
Output VSWR	≤ 1.2:1	Isolator Included
Noise Figure	8 dB (Max.)	
HPA Enable / Disable	TTL "Low" Enable TTL "High or Open" ⇒ Disable	
Switching On/Off @ 90% Rise/Fall Time	≤ 3µs	
Forward Power Monitor	4.0 ± 0.1V @ +44 dBm	RMS Detection at Pin 1
Reverse Power Monitor	4.0 ± 0.1V @ +44 dBm	RMS Detection at Pin 2
Current Sensor	100mV/A	Pin 3
VVA Control	+5V : Max Gain 0V : Maximum Attenuation	Pin 4
VVA Range	> 25 dB	
DC Input Voltage / Current	+28VDC ± 1V / 4.5A (Max.)	DC Input Voltage / Current @ CW Pout @ +44dBm
Max. CW Input (Without Damage)	-10 dBm	
Input / Output Impedance	50 Ω	
DC Input Protection	With Voltage Limit Diode	

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 6, 7
Dimensions	8.6" x 3.54" x 1.20"	
Weight	2.6 lb	

Revision History			
REV	Reason to Change	Date	Initialed by
	Released to Production	05/28/16	Y.Z.

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

4. DB9 Pin Description		
1	Forward Power Monitor	0 – 4.0 V
2	Reverse Power Monitor	0 – 4.0 V
3	Current Sensor	100mV/A
4	VVA Control	0 - 5 V
5	Enable / Disable	Enable: TTL Low Disable: TTL High
6, 7	+28 VDC	
8, 9	GND	

5. Outline Drawing

