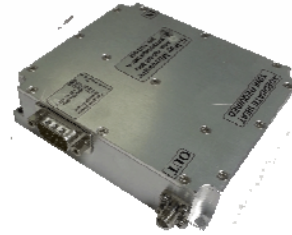




The MP750/100/43MK-A is suitable for 700-800 MHz band high power linear applications. It supports LTE, CDMA, GSM, IDEN and TDMA communication systems. The amplifier employs linear LDMOS power devices that provide sufficient output power and wide dynamic range.



Model: MP750/100/43MK-A

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	700 ~ 800 MHz	
Gain	11 ± 1 dB (Typ.)	Gain Adjustment - +/- 3 dB
Gain Flatness	± 0.5 dB (Max.)	Over Freq. Range
Gain Variation	± 0.5 dB (Typ.)	Over Temp. Range
Output P1	+ 43 dBm (Min.)	
Output Psat	+ 44 dBm (Typ.)	
Rejection @ 1575 +/- 15 MHz	- 30 dBc (Typ.)	
Input / Output VSWR	≤ 1.2:1	
Output VSWR	Isolator Included	
Over Temperature Protection	Shutdown @ +85°C ± 5°C	
HPA Enable / Disable	TTL "0V or Open" ⇒ Enable TTL "5V" ⇒ Disable	
Switch On/Off Rise/Fall Time @ 90% Power Output	1µs (Typ.)	
Forward Power Monitor	4.0 ± 0.2 V @ + 43 dBm	RMS Detection
Reverse Power Monitor	4.0 ± 0.2 V @ + 43 dBm	RMS Detection
Harmonics @ P1 dBm	- 45 dBc (Max.)	
Input / Output Impedance	50 Ω	
Max. Input Power without Damage	+ 35 dBm	
DC Input	+24-28 VDC	
Current Consumption	2.0 A (Typ.)	Pout @ +43 dBm

2. Mechanical Characteristics		
Monitoring Connector	DB-9 Male	4-40 screw
RF IN/OUT Connector	SMA 4 Holes Female	
DC Input	Pin 6,7 on DB-9 Male	
Dimensions	4.0" x 3.48" x 1.0"	

Revision History			
REV	Reason to Change	Date	Initialed by

3. Environment Characteristics		
Operating Temperature	-40°C ~ +75°C	Base Plate
Storage Temperature	-40°C ~ +120°C	
Humidity (Non-condensing)	95 %	

4. DB9 Pin Description		
1	Forward Power Monitor	
2	Reverse Power Monitor	
3	NC	
4	NC	
5	Enable / Disable	Enable: TTL Low or Open Disable: TTL High
6, 7	+24-28VDC	
8	Ground	
9	Ground	

5. Outline Drawing

