



The MP881250/47MK-A2 is suitable for broadband high power linear applications. The amplifier employs linear LDMOS power devices that provide sufficient output power, wide dynamic range, and high gain.

**Model: MP881/25/47MK-A2**

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	869 ~ 894 MHz	
Gain	50 ± 1dB	
Gain Flatness	± 1.0dB	Over Freq. Range
Gain Variation	± 1dB	Over Temp. Range
Output Power P1	+47 dBm (Min.)	
Output Power Psat	+ 49 dBm (Typ.)	
Output 3 <sup>rd</sup> Intercept Point	+ 62 dBm	2 tones @ +40 dBm output power, 1 MHz Spacing
ACPR @ +40 dBm	- 50 dBc @ ± 750 KHz to 1.98 MHz offset from F0 (RBW = 30 kHz) - 60 dBc @ ± 1.98 MHz to 4 MHz offset from F0 (RBW = 30 kHz)	<b>Signal Source:</b> CDMA2000 :1.23 MHz Symbol Rate, Forward Link, 9 Channels
Input / Output VSWR	≤ 1.2	Output Isolator Included
Harmonics	-45 dBc (Max.)	
Spurious	-70 dBc (Max.)	
HPA Enable/Disable	TTL "0V or Open" : Enable TTL "5V" : Disable	
VVA Control	+5V: Maxim Gain 0V: Maxim Attenuation	
VVA Range	>25 dB	
Forward Power Monitor	4.0 ± 0.1 V @ +40 dBm	RMS Detection
Reverse Power Monitor	4.0 ± 0.1 V @ +40 dBm	RMS Detection
DC Input Voltage / Current	+28 VDC ± 1V / 2.7A	DC Input Voltage / Current @ Pout +40 dBm CW
Thermal Shutdown	+85°C ± 5°C	Auto Recover @ +70°C ± 5°C
Input / Output Impedance	50 Ω	
Input Max without Damage	+10 dBm	<b>With ALC on</b>

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	
Dimensions	6.4" x 3.4" x 1"	
LED	LED Indicator	ALC On

Revision History			
REV	Reason to Change	Date	Initialed by

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

4. DB9 Pin Description		
1	Forward Power Monitor	
2	Reverse Power Monitor	
3	NC	
4	VVA Control	0-5V
5	Enable / Disable	Enable: TTL Low or Open Disable: TTL High
6, 7	+28V	
8, 9	Ground	

