



The MP881/25/45MK-A4 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: MP881/25/45MK-A4

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	869 ~ 894 MHz	
Gain	50 ± 1dB	
Gain Flatness	± 0.5 dB	Over Freq. Range
Gain Variation	± 1 dB	Over Temp. Range
Output Power P1	+45 dBm (Min.)	
Output Power Psat	+ 46 dBm (Min.)	
Output 3 rd Intercept Point	+ 57 dBm	2 tones @ +38 dBm output power, 1 MHz Spacing
ACLR @ +45 dBm	- 30 dBc @ ± 200 KHz offset from F0 (Max.) (RBW = 30 kHz)	Signal Source: 1 GSM
	-55 dBc @ ± 400 KHz offset from the F0 (Max.) (RBW = 30 kHz)	
Input / Output VSWR	≤ 1.2	Output Isolator Included
Harmonics	-40 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	2.4 ± 0.1 V @ +44 dBm	RMS Detection
Reverse Power Monitor	2.4 ± 0.1 V @ +44 dBm	RMS Detection
Input Power Monitor	2.4 ± 0.1 V @ +20 dBm	RMS Detection
Current Sensor	10mV/100mA	
DC Input Voltage / Current	+ 28 VDC ± 1V / 3.0A	DC Input Voltage / Current @ Pout +45 dBm CW
Thermal Shutdown	+85°C ± 5°C	Auto Recover @ +70°C ± 5°C
Input / Output Impedance	50 Ω	
Input Max without Damage	+25 dBm	With ALC on

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"	

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	Input Power Monitor	
4	VVA Control	0-5V
5	Enable / Disable	Enable: TTL Low or Open Disable: TTL High
6,7	+ 28VDC	
8	Current Sensor	10mV/100mA
9	Ground	

5. Outline Drawing

