The **MP881/25/44MK-A5** 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: MP881/25/44MK-A5

1. Electrical Characteristics

Item	Value	Note
Frequency Range	869 ~ 894 MHz	
Gain	45 ± 1dB	
Gain Flatness	± 0.5 dB	Over Freq. Range
Gain Variation	± 1dB	Over Temp. Range
Output Power P1	+44 dBm (Min.)	
Output Power Psat	+ 45 dBm (Min.)	
Output 3rd Intercept Point	+ 56 dBm	2 tones @ +37 dBm output 1 MHz Spacing
ACLR @ +44 dBm	- 30 dBc @ ± 200 KHz offset from F0 (Max.) (RBW = 30 kHz) -55 dBc @ ± 400KHz offset from the F0 (Max.) (RBW = 30 kHz)	**Signal Source:** **1 GSM**
ACPR @ 5 Watts Output	-50 dBc @ ± 750 kHz to 1.98 MHz offset (RBW = 30 kHz) -65 dBc @ ± 1.98 MHz to 4 MHz offset (RBW = 30 kHz)	**Signal Source:** **CDMA2000: 1.23 MHz symbol rate; Forward Link; 9 Channels**
Input / Output VSWR	≤ 1.2	**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 / 2.5A	DC Input Voltage / Current Pout @ +44 dBm CW
Thermal Shutdown	+85°C ± 5°C	Auto Recover @ +70°C ± 5°C
Input / Output Impedance	50 Ω	
Max Input Signal ***(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
	Released for Production	06/16/14	Y.Z.

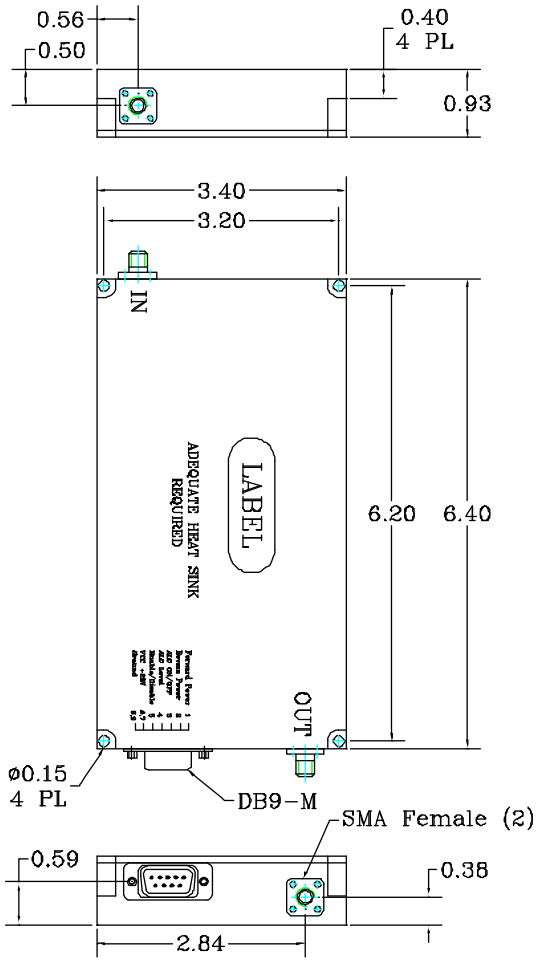
3. Environment Characteristics

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 Senor	10mV/100mA
9	Ground	

5. Outline Drawing



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