MP500/1000/44SK-A is a broadband high power amplifier for VHF-UHF/Cellular/GSM applications. Amplifier supports signal amplification in the 5-1000 MHz frequency band and is protected against over-temperature and excessive current draw.

Model: MP500/1000/44SK-A

1. Electrical Characteristics

Item	Value	Note
Frequency Range	5 ~ 1000 MHz	
Gain	30 dB (Min.)	
Gain Flatness	± 1.5 (Max.)	Over Frequency Range
VVA Range	25 dB (Min.)	
Output P1	+42 dBm (Typ.)	
Output Psat	+44 dBm (Min.)	
Output IP3	50 dBm (Typ.)	**2 Tones @ +27 dBm /Tone, 100 KHz Spacing**
Input / Output VSWR	2:1 (Max.)	
Spurious	-60 dBc (Max.)	
Efficiency	16% (Min.)	Pout @ 25 Watts
2nd Harmonics	-10 dBc (Max.)	Pout @ 25 Watts
HPA Enable / Disable	**TTL "0V or Open" ⇒ Enable TTL "5V" ⇒ Disable**	
Temperature Sensor Output	10 mV / °C	
Current Sensor Output	100 mV / A	
HPA Switching ON/OFF Speed	1 µs	
DC Input Voltage	+26 ~ + 28 V	
Current Consumption	6.5 A (Max.)	Pout @ 25 Watts
Input / Output Impedance	50 Ω	
Max. Input Signal ***(Without Damage)***	+17 dBm	

2. Mechanical Characteristics

Monitoring Connector	DB9-Male	4 – 40 screw
RF IN/OUT Connector	SMA 4 Holes – Female	
DC Input	Pin 6 and Pin 7 @ DB9	
Dimensions	6.4" x 3.4" x 1.06"	

3. Environment Characteristics

Operating Temperature	-40°C ~ +70°C	Base Plate

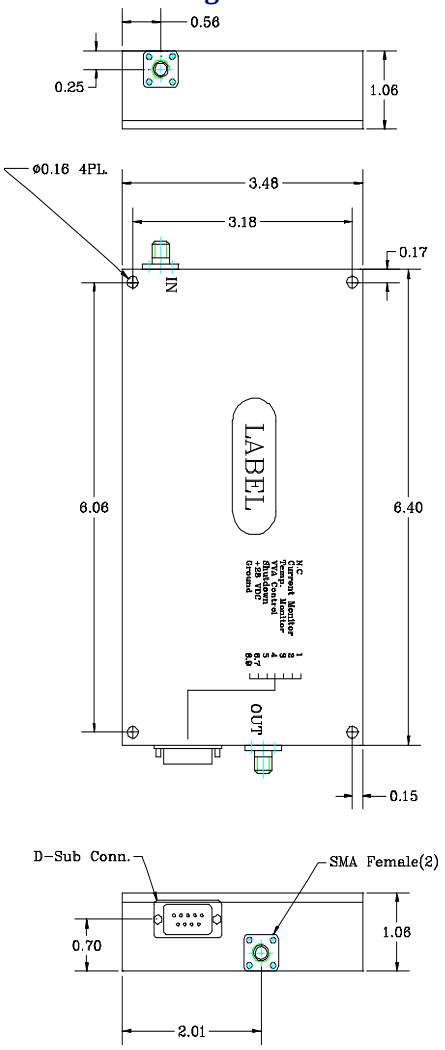
Revision History

REV	Reason to Change	Date	Initialed by
	Released to Production	03/17/17	YZ

4. DB9 Pin Description

1	N/C	
2	Current Monitor	100 mV / A
3	Temperature Monitor	10 mV / °C
4	VVA Control	0-5V 0V: Gain Max. 5V: Gain Min.
5	Enable / Disable	0V or Open: Enable 5V: Disable
6, 7	+28 V	
8, 9	GND	

5. Outline Drawing



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