

AMP1099B SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMC-EMI/RFI, Lab, and general comm applications
 Small form factor, high power density
 Class AB linear GaN design
 Instantaneous ultra-wide bandwidth
 Suitable for all single channel modulation standards
 Built-in protection circuits
 High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50 Ω , 25°C

Parameter		Specification	Notes
Operating Frequency Range		0.7 - 6.0 GHz	
Power Output @ Psat		50 Watt Min	>60 Watt Typ
Power Output @ P1dB		25 Watt Typ	
Power Gain		47 dB Min	
Power Gain Flatness		4.0 dB p-p Max	Constant input power
Input / Output Return Loss		-10 dB Max	
2-Tone Intermodulation (IMD)		<-30 dBc Typ	37dBm/Tone, Δ = 1 MHz
Harmonics	2 nd	<-20 dBc Typ	-11dBc Typ below 1GHz
	3 rd	<-30 dBc Typ	<-15 dBc below 1GHz
Spurious		-60 dBc Max	Non-harmonics
Operating Voltage		28 VDC Nom	
Current Consumption		10 Amp Max / <8 Amp Typ	At rated Pout
Input Power Protection		+8 dBm Max	<10 Sec without damage
Load VSWR Protection		5 : 1 Max	<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport ¹	

1. MIL-Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	230 (260 ¹) x 106 x 27 mm	Excluding connectors
Weight	1.25 Kg.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

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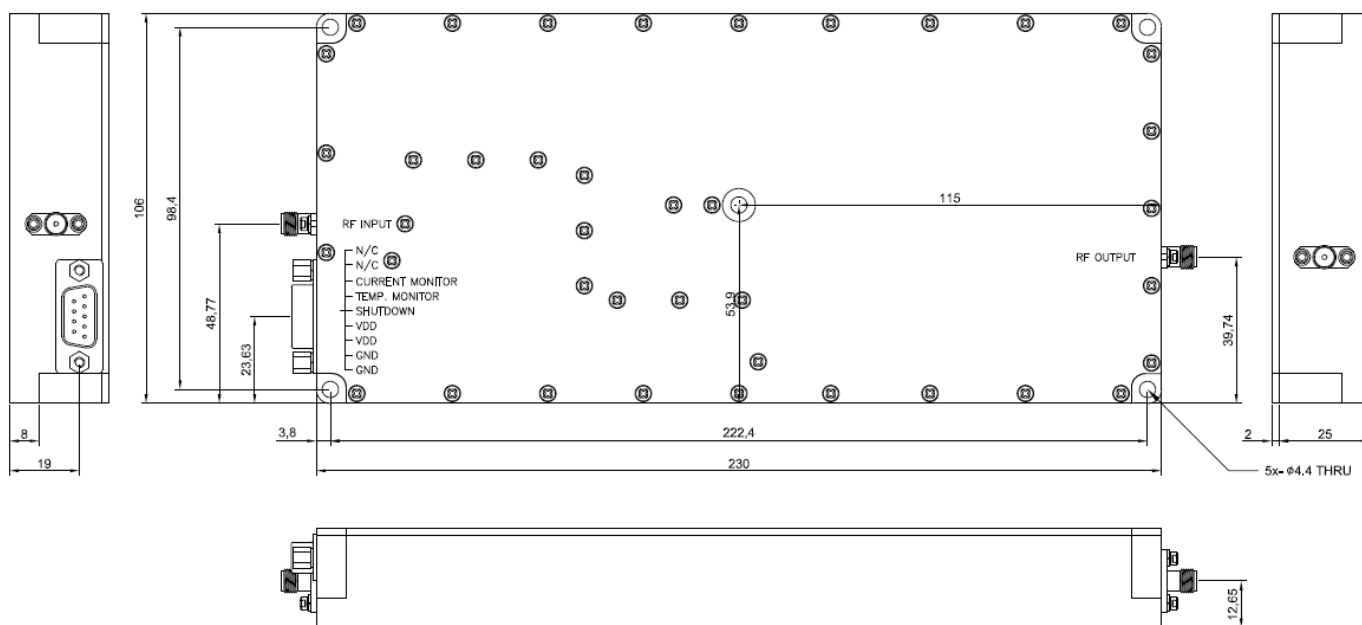
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	OPTION 101 - Forward power detect
2	VVA	OPTION 103 - Variable Voltage Attenuator
3	CURRENT MONITOE	$I_D @ 20mV/100mA$ Typ
4	TEMP MONITOR	$V_T @ 10mV/^{\circ}C + 500mV$ Typ
5	SHUTDOWN	TTL Enable = TTL "High" (>3.2V) or Open / Disable = TTL "Low"
6, 7	VDD	28VDC
8, 9	GND	Ground

Notes:

- Length with Options 101 & 103

OUTLINE DRAWING



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OUTLINE DRAWING WITH OPT 101 &103

