

AMP1053

SOLID STATE HIGH POWER AMPLIFIER

FEATURES

- Class AB linear LDMOS design
- Instantaneous wide bandwidth
- Suitable for all single channel modulation standards
- Built-in monitoring and protection circuits
- High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50Ω, 25°

Parameter	Specification	Notes
Operating Frequency Range	20 - 100 MHz Min	
Power Output @ Pin=0dBm	200 Watt Min	CW
Power Gain	53 dB Min	
Power Gain Flatness	3.0 dB p-p Max	
Input Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	<-30 dBc Typ	43dBm/Tone, Δ = 1MHz
Harmonics	2 nd <-20dBc, 3 rd <-12dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	32 VDC Nom	
Current Consumption	15 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	∞ : 1	<1 minute at rated Pout
Turn On / Off Speed	5 μSec Max	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

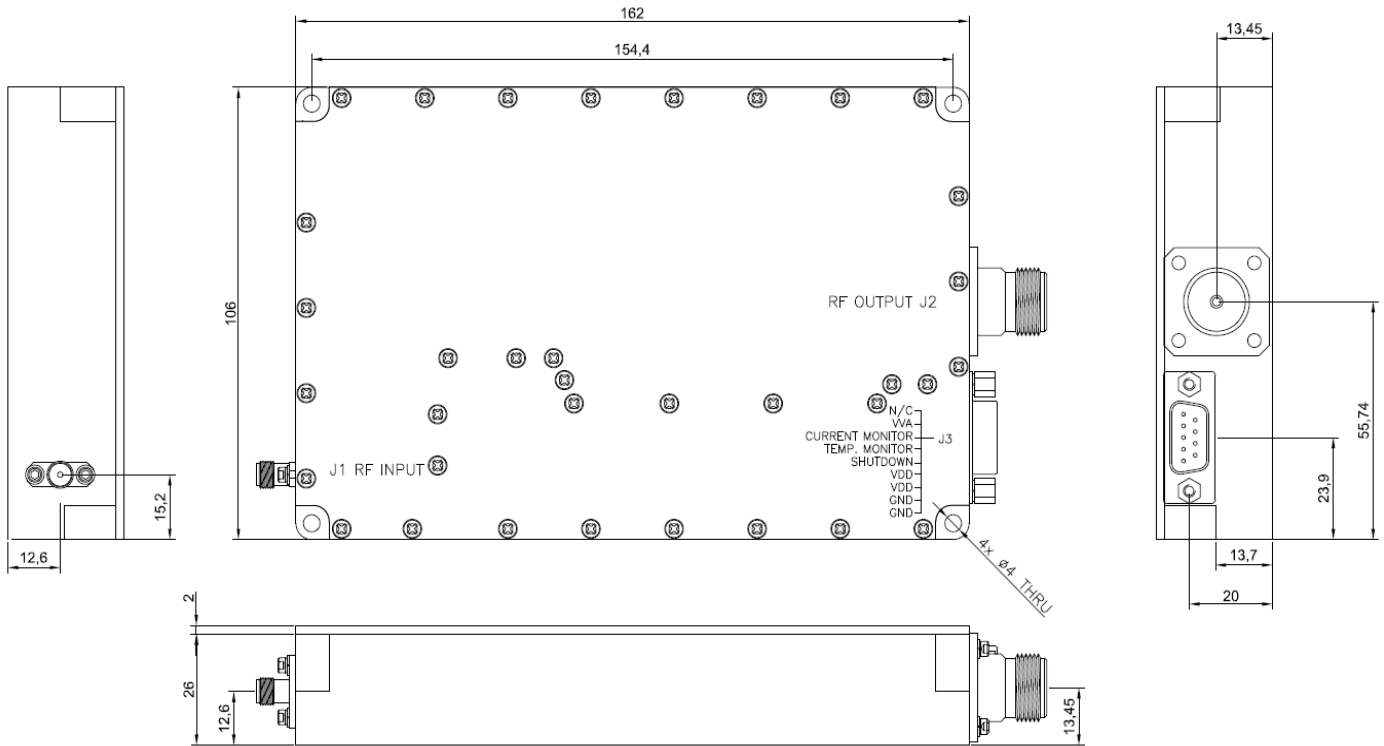
Parameter	Specification	Notes
Dimensions	Option 103: 162 X 106 X 28 mm Option 101: 200 X 106 X 28 mm	Excluding connectors
Weight	700 gr.	
RF Connectors In/Out	SMA-F / Type-N	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Option-101 - Analog Forward Power Indicator
2	VVA	Option-103 - Analog Gain Control
3	CURRENT SENSOR	I _D @20mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1	VDD	32VDC
A2	GND	Ground

AMP1053 SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING - OPTION 103



SHOWN WITH OPTION 101 & 103

