

L0618-50-T523 6-18 GHz 100 W Power Amplifer Rack Mount Configuration

Description

The L0618-50-T523 is a high power broadband gallium nitride (GaN) amplifier providing 100W of saturated output power over the 6-18 GHz frequency range. The unit is designed for a land mobile Electronic Warfare application requiring operation from -20 to +50 °C base plate temperature and is provided with heat sinks and fans for cooling. The amplifier operates from 32 V - 36 V DC and is a compact 9.75" x 8.25" x 6". Fault protection is provided with over temperature and reverse power monitors.



Figure 1: L0618-50-T523

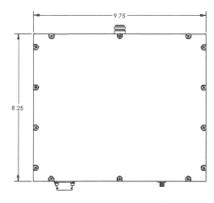
Characteristics

Feature	Description
Frequency Range	6.0 to 18.0 GHz
Saturated Output Power	50 dBm typ @ 25 °C; 49.5 dBm min
Small Signal Gain	55 dB minimum
Gain Flatness	± 5.0 dB typical
Harmonics	-4 dBc typical
AM/PM Conversion	6 degrees/dB typical
Noise Power Density	-90 dBm/Hz typical
Input/Output VSWR	2:1 typical
Spurious	-45 dBc typical
Fault Indications	Over Temperature, Reverse Power
Indications	Standby & Operate
Commands	Operate & Fault Override
Power Supply	+32 to +36 V DC at 1 kW typical
DC/Control Interface	12 pin miniature cylindrical connector
RF Connectors	SMA Female Input, N-type Female Output
Operating Temperature	-20 to +50 °C base plate
Outline Dimensions	9.75" x 8.25" x 6.0"
Environment	Shock/Vibration MIL-STD-810F Environmentally Sealed

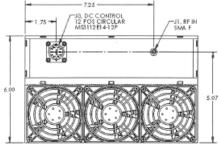


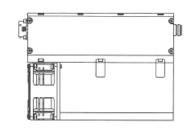
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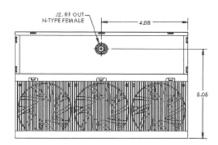
Outline Drawing



J3 DC Control	
FUNCTION	
Operate Command	
Fault Override Command	
Standby Indication	
Operate Indication	
NC	
Fault Indication	
NC	
NC	
+32 V	
+32 V	
GND	
GND	







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