

Model:TLPA0.4G3G-44-44

Power Amplifier

0.4-3GHz,Gain:44dB,Psat:44dBm

Feature:

- Ultra Wide Band: 0.4-3 GHz
- Gain: 44 dB Typ
- Psat Output Power: 44 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.4-3			GHz
Gain	40	44		dB
Gain Flatness		±3	±3.5	dB
Output P1dB		42		dBm
Output Psat	44	45		dBm
Harmonic@Pout=44dBm		-10		dBc
Input VSWR		1.5	2.0	:1
DC Voltage		48	50	V DC
DC Supply Current		1	3	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	D-SUB-9	
Size	160*95*20	mm
Weight	550	g

Absolute Maximum Ratings:

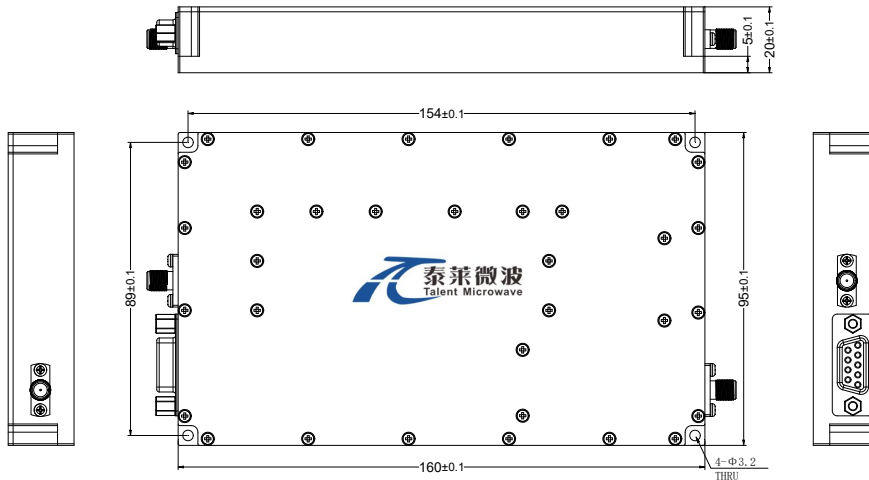
Parameter	Value
Supply Bias Voltage	+50 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

D-sub, 9-Pin, Female:

Pin	Identification	Type	Function specification
1	Over Voltage	Output	When the power supply voltage of the power amplifier exceeds the threshold, the power amplifier is turned off and this pin outputs a high level.
2	GND	Supply	Power supply negative
3	GND	Supply	Power supply negative
4	VCC	Supply	Power supply positive
5	VCC	Supply	Power supply positive
6	EN	Input	A high (or suspended) level 5V turns on the power amplifier, and a low level turns it off
7	Reset	Input	When the power amplifier triggers overcurrent protection, the power amplifier will be turned off and enter a state of lockout, and shorting to ground for 10ms will restart the power amplifier. Only the overcurrent protection can be reset.
8	Over Temp	Output	When the temperature of the power amplifier housing is greater than 70° C, the power amplifier is closed and this pin will output a high level. When the temperature of the power shell is reduced to 60°C, the power amplifier returns to normal operation, and this pin will output a low level.
9	Over Current	Output	When the power amplifier current exceeds the threshold, the power amplifier is turned off and this pin outputs a high level.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	°C
Non-operating Temperature*	-50		+60	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Part Number	Description	Revision
TLPA0.4G3G-44-44	Power amplifier 0.4-3GHz,Gain:44dB,Psat:44dBm, +48V DC,Without Heatsink	Rev.1.1
TLPA0.4G3G-44-44-HS	Power amplifier 0.4-3GHz,Gain:44dB,Psat:44dBm, +48V DC,With Heatsink	Rev.1.1