

Power Amplifier

0.7-5GHz/20dB Gain/32dBm Psat

Model: TLPA0.7G5G-20-32

TLPA0.7G5G-20-32 is a power amplifier with a minimum gain of 20 dB and a nominal Psat of 32 dBm across the frequency range of 0.7 to 5 GHz. The DC power requirement for the amplifier is +12 VDC/0.7 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.7-5GHz
- Gain: 20dB Min
- Output Power Psat: 32dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	0.7		5	GHz
Gain	20	25		dB
Gain Flatness		±2	±3	dB
Output P1dB	30	31		dBm
OutputPsat		32		dBm
Harmonic @Pout=40dBm		-15		dBc
Input VSWR		1.5	2	:1
DC Voltage		+12	+15	V DC
DC Supply Current		0.7	1	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	100*50*15	mm
Weight	150	g

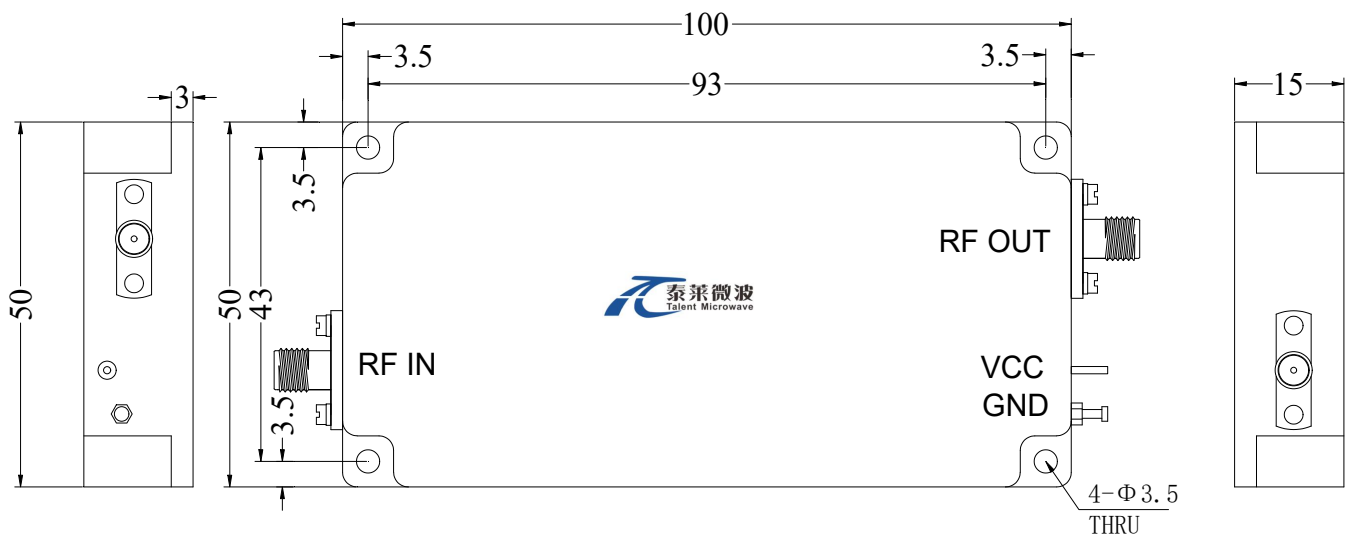
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	0 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm



*****Heat Sink Required During Operation**



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-50		+70	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
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:

Base Number	Description	Revision
TLPA0.7G5G-20-32	Power amplifier 0.7-5GHz, Gain:20dB,Psat:32dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA0.7G5G-20-32-HS	Power amplifier 0.7-5GHz, Gain:20dB,Psat:32dBm,+12V DC,With Heatsink	Rev.1.1