

Model:TLPA1G18G-30-30

Power Amplifier

1-18GHz, Gain:30dB, P1dB:30dBm

Feature:

- Ultra Wide Band:1-18GHz
- Gain:30dB Min
- P1dB Output Power:30dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	1-18			GHz
Gain	30			dB
Gain Flatness		±2	±2.5	dB
Output P1dB	30			dBm
Output Psat		31		dBm
Noise Figure			5	dB
Spurious		-60		dBc
Input VSWR		2	2.2	:1
Output VSWR		2	2.2	:1
DC Voltage		18	20	V DC
DC Supply Current		1		A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	58.5*38*12	mm
Weight	50	g

Absolute Maximum Ratings:

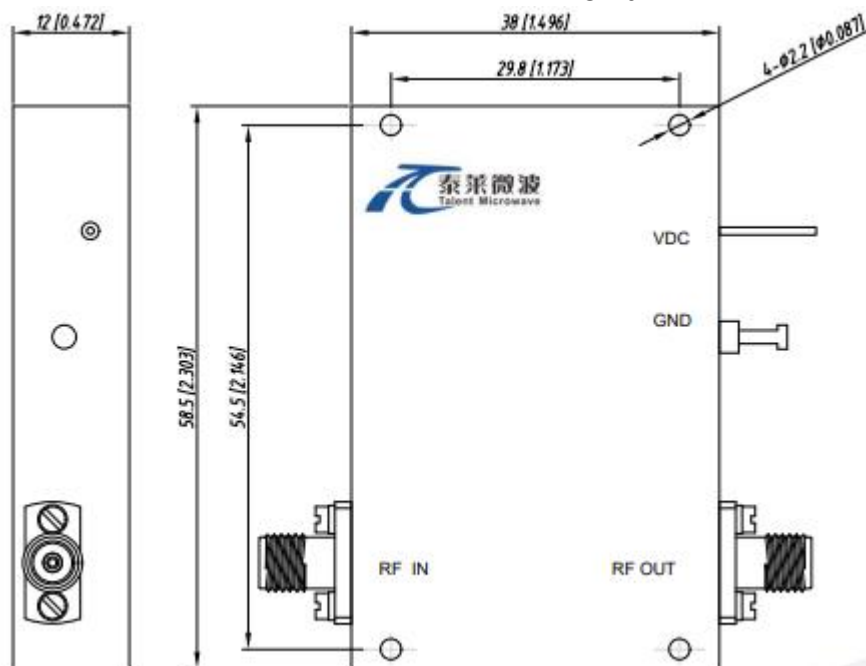
Parameter	Value
RF Input Power	+6 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

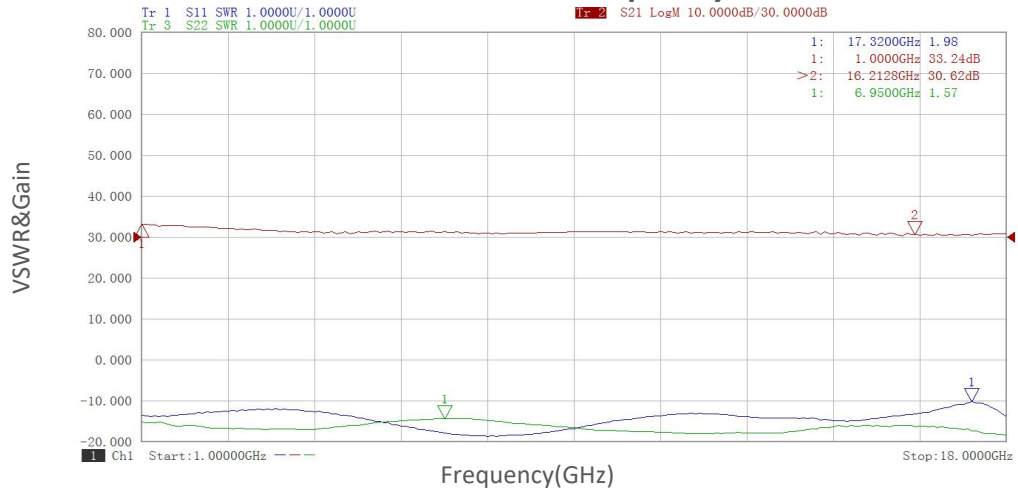
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

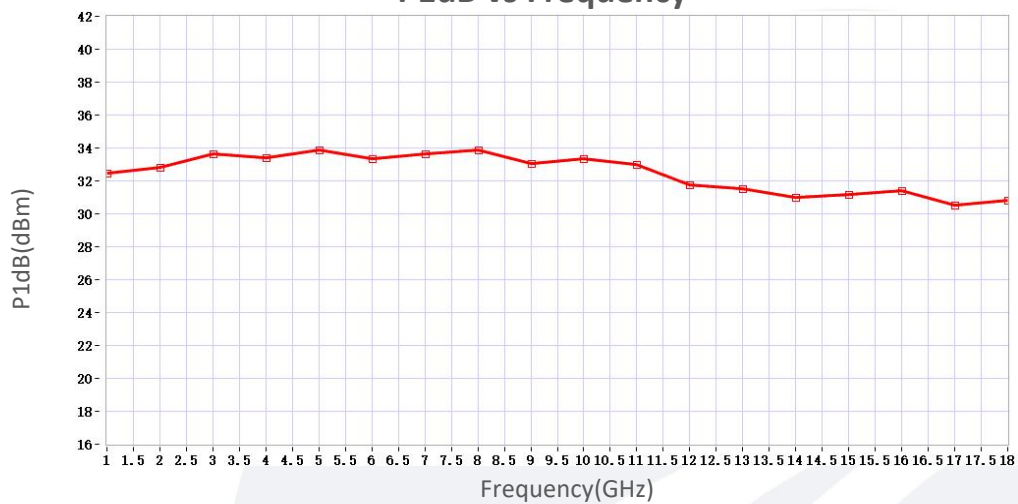
Part Number	Description	Revision
TLPA1G18G-30-30	Power amplifier 1-18GHz,Gain:30dB,P1dB:30dBm,+24V DC,Without Heatsink.	Rev.1.2
TLPA1G18G-30-30-HS	Power amplifier 1-18GHz,Gain:30dB,P1dB:30dBm,+24V DC,With Heatsink.	Rev.1.2

Typical Performance Data:

VSWR&Gain vs Frequency



P1dB vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.