

Power Amplifier

0.1-18GHz/30dB Gain/29dBm Psat

Model: TLPA0.1G18G-30-27

TLPA0.1G8G-30-27 is a power amplifier with a minimum small signal gain of 30 dB and a nominal Psat of 29 dBm across the frequency range of 0.1 to 18 GHz. The DC power requirement for the amplifier is +12 VDC/800 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.1-18GHz
- Gain: 30dB Min
- Output Power Psat: 29dBm 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	0.1		18	GHz
Small Signal Gain	30	35		dB
Gain Flatness		±1.5		dB
Gain Variation Over Temperature		±1		dB
Output P1dB	27			dBm
Output Psat		29		dBm
Nosie Figure		5		dB
Spurious		-60		dBc
Input VSWR			2.2	:1
Output VSWR			2.2	:1
DC Voltage		+12		V DC
DC Supply Current		800	900	mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	50*30*12	mm
Weight	50	g

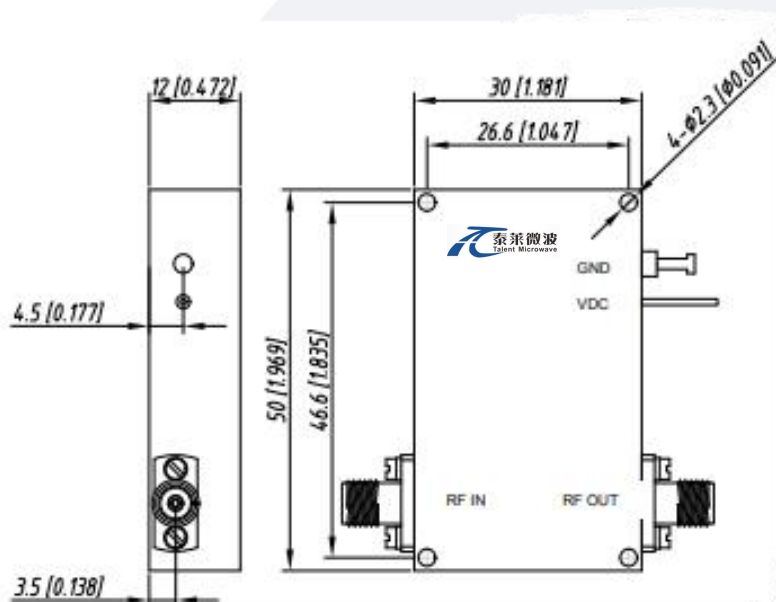
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	0 dBm
RF Input Power	TBD
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	escription	Revision
TLPA0.1G18G-30-27	Power amplifier 0.1-18GHz, Gain:30dB,Psat:29dBm,+12V DC,Without Heatsink.	Rev.1.1
TLPA0.1G18G-30-27-HS	Power amplifier 0.1-18GHz, Gain:30dB,Psat:29dBm,+12V DC,With Heatsink.	Rev.1.1