

Power Amplifier

0.7-6GHz/40dB Gain/41dBm Psat

Model: TLPA0.7G6G-40-41

TLPA0.7G6G-40-41 is a power amplifier with a minimum gain of 40 dB and anominal Psat of 41 dBm across the frequency range of 0.7 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/1.5 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.7-6GHz
- Gain: 40dB Min
- Output Power Psat: 41dBm 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		6	GHz
Gain	40	43		dB
Gain Flatness		±3		dB
Output P1dB	40	40.5		dBm
Output Psat		41		dBm
Harmonics		-15	-13	dBc
Input VSWR		1.5	2.5	:1
DC Voltage		+28		V DC
DC Suppply Current		1.5		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	90*65*12	mm

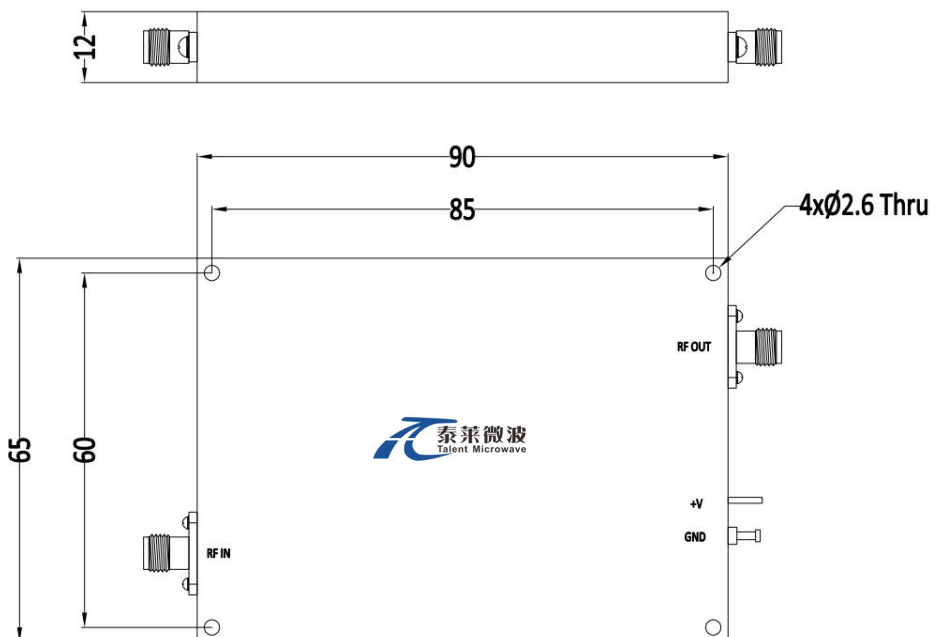
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 V
RF Input Power	0 dBm
SD 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		+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:

Base Number	Description	Revision
TLPA30G36G-46-46	Power amplifier 0.7-6GHz, Gain:40dB,Psat:41dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA30G36G-46-46-HS	Power amplifier 0.7-6GHz, Gain:40dB,Psat:41dBm,+28V DC,With Heatsink	Rev.1.1