

Power Amplifier

1-2GHz/46dB Gain/46dBm Psat

Model: TLPA1G2G-46-46

TLPA1G2G-46-46 is a power amplifier with a minimum power gain of 46 dB and a minimum Psat of 46 dBm across the frequency range of 1 to 2 GHz. The DC power requirement for the amplifier is +28 VDC/6 A. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 1-2GHz
- Gain: 46dB Min
- Output Power Psat: 46dBm Min
- 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	1		2	GHz
Working Mode	CW/PULSE compatible			
Power Gain	46			dB
Power Gain Flatness		±1		dB
Output Psat	46	47		dBm
Spurious@Pout=46dBm			-60	dBc
Harmonic@Pout=46dBm		-15	-10	dBc
Input VSWR			2	:1
DC Voltage		28	29	V DC
DC Supply Current			6	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Power Supply Connector	J30J-9ZKP	Pin1: Enable Pin2~5: +28V Pin6~9: GND
Size	150*90*25	mm
Weight	≤500	g

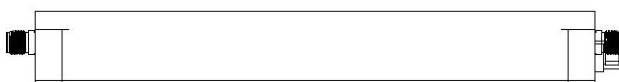
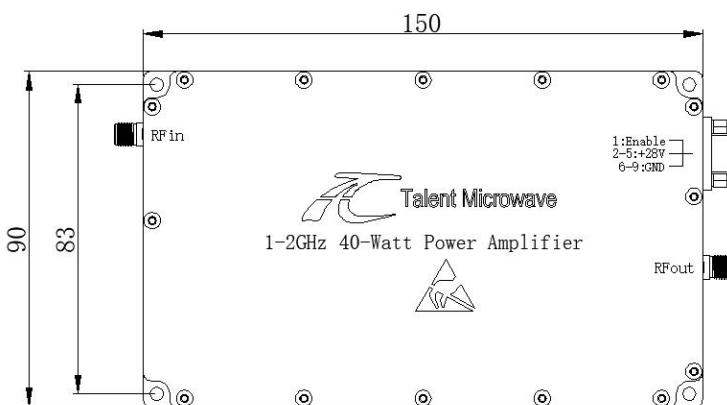
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+29 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

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

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)	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
TLPA1G2G-46-46	Power amplifier 1-2GHz, Gain:46dB,Psat:46dBm,+28V DC,Without Heatsink	Rev.1.0
TLPA1G2G-46-46-HS	Power amplifier 1-2GHz, Gain:46dB,Psat:46dBm,+28V DC,With Heatsink	Rev.1.0