

Power Amplifier

24-30GHz/40dB Gain/40dBm Psat

Model: TLPA24G30G-40-40

TLPA24G30G-40-40 is a power amplifier with a minimum small signal gain of 40 dB and a minimum Psat of 40 dBm across the frequency range of 24 to 30 GHz. The DC power requirement for the amplifier is +18 VDC/5 A. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 24-30GHz
- Gain: 40dB Min
- Output Power Psat: 40dBm 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	24-30			GHz
Small Signal Gain	40			dB
Gain Flatness		±3		dB
Output P1dB		37		dB
Output Psat	40			dBm
Spurious		-60		dBc
Input VSWR		2		:1
DC Voltage		18		V DC
DC Supply Current		5		A
Impedance	50			Ohms

Mechanical Specifications:

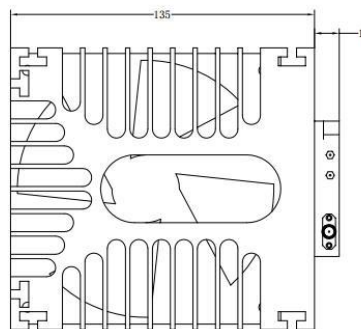
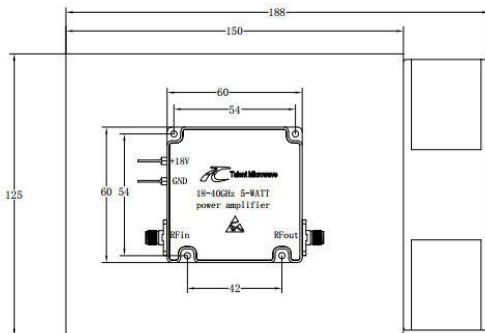
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Supply Connector	Feedthru capacitors	
Size	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	≤200	g

Absolute Maximum Ratings:

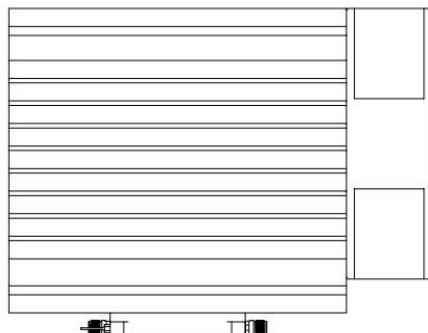
Parameter	Value
Supply Bias Voltage	+19V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Regulatory Compliance:



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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
TLPA24G30G-40-40	Power amplifier 24-30GHz, Gain:40dB,Psat:40dBm,+18V DC,Without Heatsink	Rev.1.1
TLPA24G30G-40-40-HS	Power amplifier 24-30GHz, Gain:40dB,Psat:40dBm,+18V DC,With Heatsink	Rev.1.1