

Power Amplifier

33-37GHz/40dB Gain/37dBm Psat

Model: TLPA33G37G-40-37

TLPA33G37G-40-37 is a power amplifier with a minimum power gain of 40 dB and a minimum Psat of 37 dBm across the frequency range of 33 to 37 GHz. The DC power requirement for the amplifier is +24 VDC/50 W. The input and output port configuration offers coax adapter structure with 2.4mm female.

Features:

- Frequency range: 33-37GHz
- Power Gain: 40dB Min
- Output Power Psat: 37dBm 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	33		37	GHz
Power Gain	40			dB
Psat Flatness		±1.5		dB
Linear gain flatness		±3		dBm
Output Psat	37			dBm
Spurious@Pout=37dBm			-50	dBc
Harmonics			-20	dBc
Input VSWR			2	:1
DC Voltage		+24		V DC
Power Consumption			50	W
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Supply	Feedthru capacitors	
Size	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	≤200	g

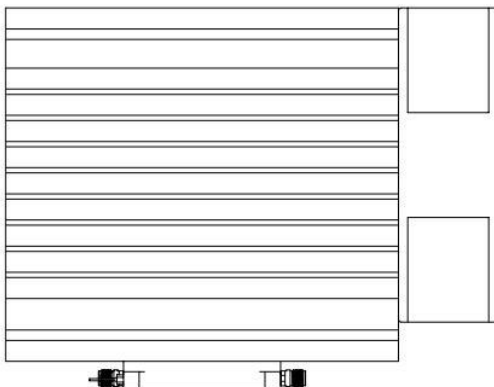
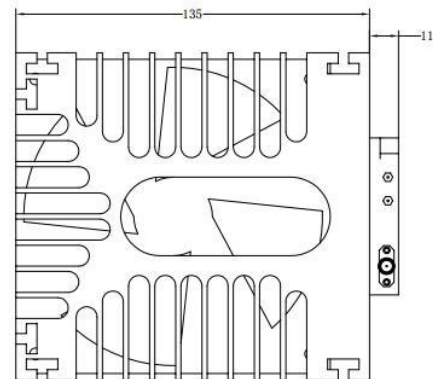
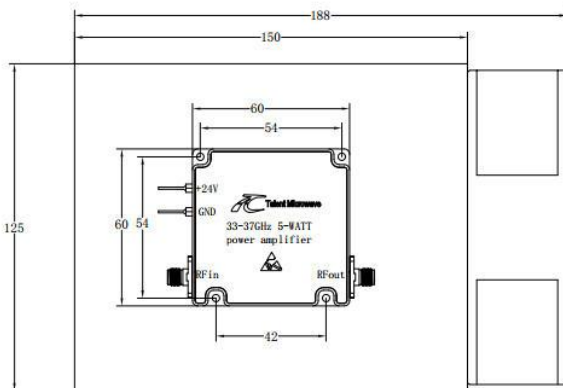
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+26 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm



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	Description	Revision
TLPA33G37G-40-37	Power amplifier 33-37GHz, Gain:40dB,Psat:37dBm,+24V DC,With Heatsink	Rev.1.1