

Power Amplifier

6-12GHz/36dB Gain/40dBm Psat

Model: TLPA6G12G-36-36

TLPA6G12G-36-36 is a power amplifier with a minimum small signal gain of 36 dB and a nominal Psat of 40 dBm across the frequency range of 6 to 12 GHz. The DC power requirement for the amplifier is +28 VDC/3.5 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 6-12GHz
- Gain: 36dB Min
- Output Power Psat: 40dBm 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	6		12	GHz
Small Signal Gain	36			dB
Gain Flatness		±2.5		dB
Output P1dB	36	37		dBm
Output Psat		40		dBm
Spurious		-60		dBc
Input VSWR		1.5	2	:1
DC Voltage		+28		V DC
DC Supply Current		3.5		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Feedthru capacitors	
Size	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm

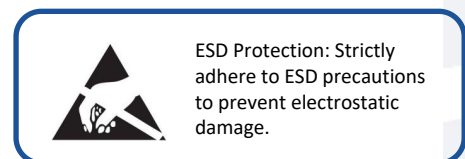
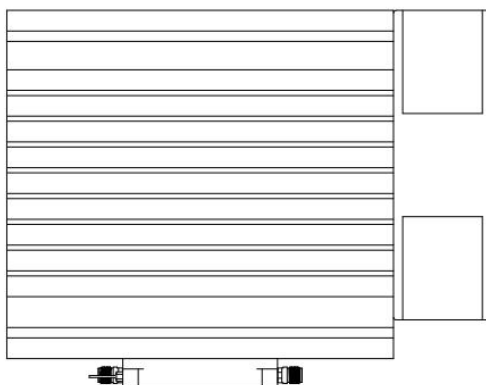
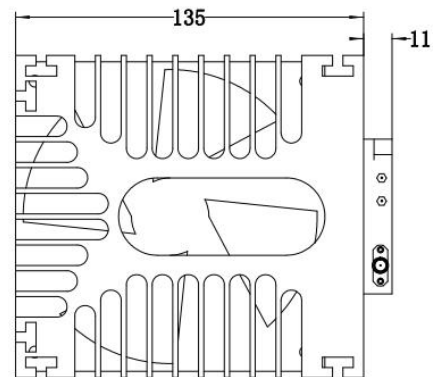
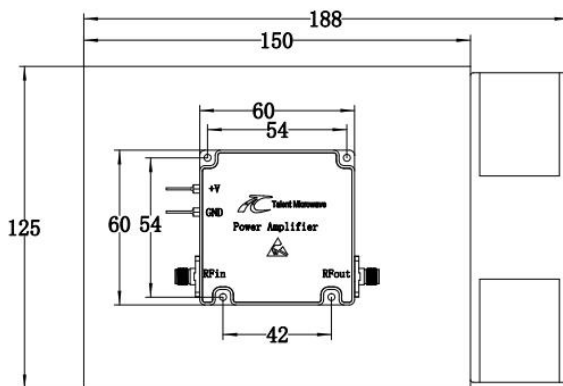
Absolute Maximum Ratings:

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



Outline Drawing:

Unit:mm



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
TLPA6G12G-36-36	Power amplifier 6-12GHz, Gain:36dB,Psat:40dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA6G12G-36-36-HS	Power amplifier 6-12GHz, Gain:36dB,Psat:40dBm,+28V DC,With Heatsink	Rev.1.1