

Power Amplifier

18-26.5GHz/42dB Gain/42dBm Psat

Model: TLPA18G26.5G-42-42

TLPA18G26.5G-42-42 is a power amplifier with a minimum power gain of 40 dB and a minimum Psat of 42 dBm across the frequency range of 18 to 26.5 GHz. The DC power requirement for the amplifier is +22 VDC/100W. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 18-26.5GHz
- Gain: 42dB Min
- Output Power Psat: 42dBm 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	18-26.5			GHz
Power Gain	42			dB
Gain Flatness		±3		dB
Output Psat	42			dBm
Spurious@Pout=42dBm			-60	dBc
Harmonic@Pout=42dBm			-15	dBc
Input VSWR			2	:1
DC Voltage		22		V DC
DC Supply Current			100	W
Impedance	50			Ohms

Mechanical Specifications:

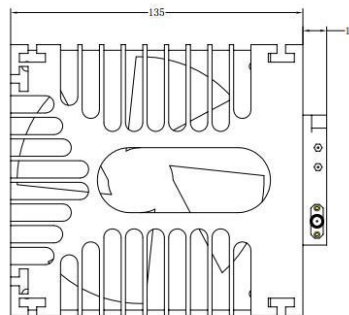
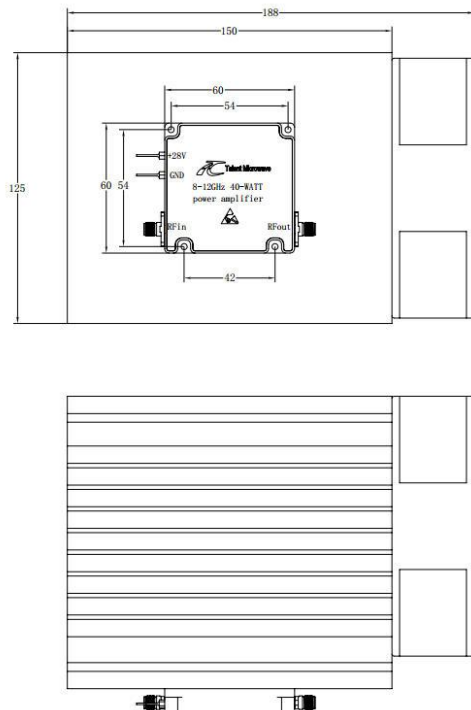
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Feedthru capacitors	
Size	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	≤200	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+24 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Regulatory Compliance:



*****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)	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
TLPA18G26.5G-42-42	Power amplifier 18-26.5GHz, Gain:42dB,Psat:42dBm,+22V DC,Without Heatsink	Rev.1.1
TLPA18G26.5G-42-42-HS	Power amplifier 18-26.5GHz, Gain:42dB,Psat:42dBm,+22V DC,With Heatsink	Rev.1.1