Suzhou Talent Microwave,Inc
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Power Amplifier

0.7-18GHz/37dB Gain/37dBm Psat Model: TLPA0.7G18G-37-37

TLPA0.7G18G-37-37 is a power amplifier with power gain of 37 dB and a nominal Psat of 37 dBm across the frequency range of 0.7 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/3 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.7-18GHz
- Gain: 37dB Min
- Output Power Psat: 37 dBm 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		0.7-18		GHz
Power Gain	37			dB
Gain Flatness		±3.5		dB
Output Psat	37			dBm
Spurious@Pout=37dBm			-60	dBc
Harmonic@Pout=37dBm		-15	-10	dBc
Input VSWR			2	:1
DC Voltage		28		V DC
DC Supply Current			3	A
Impedance		50		Ohms

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Mechanical Specifications:

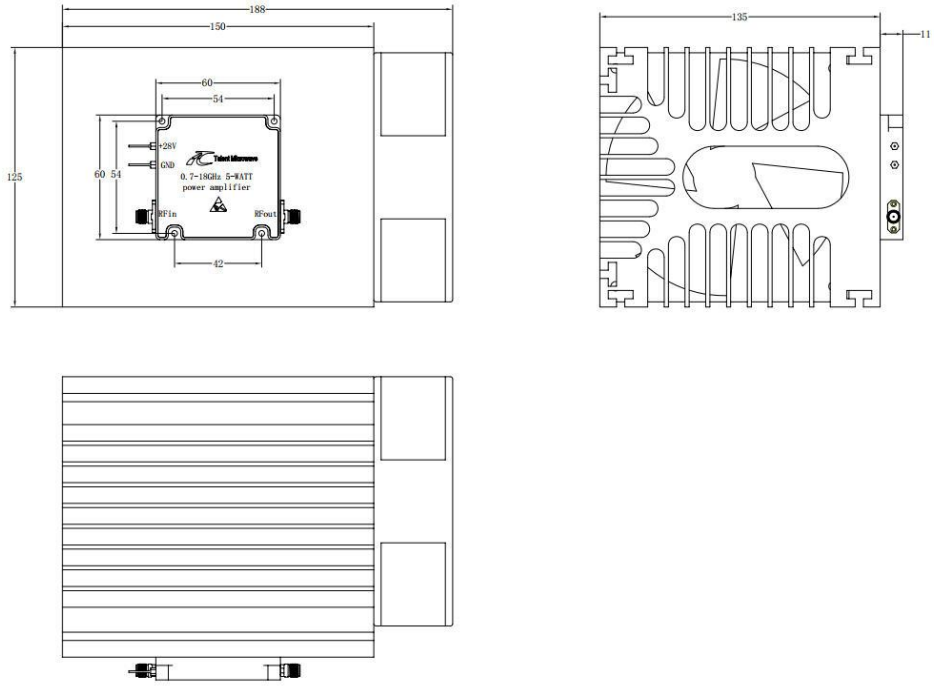
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Feedthru capacitors	
Size	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	≤200	g

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



Regulatory Compliance:

***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	℃
Non-operating Temperature*	-50		+70	℃
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
TLPA0.7G18G-37-37	Power amplifier 0.7-18GHz,Gain:37dB,Psat:37dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA0.7G18G-37-37-HS	Power amplifier 0.7-18GHz,Gain:37dB,Psat:37dBm, +28V DC,With Heatsink	Rev.1.1