

Power Amplifier

0.7-18GHz /37dB Gain/37 dBm 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:

- Ultra Wide Band: 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			±2.5	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

Mechanical Specifications:

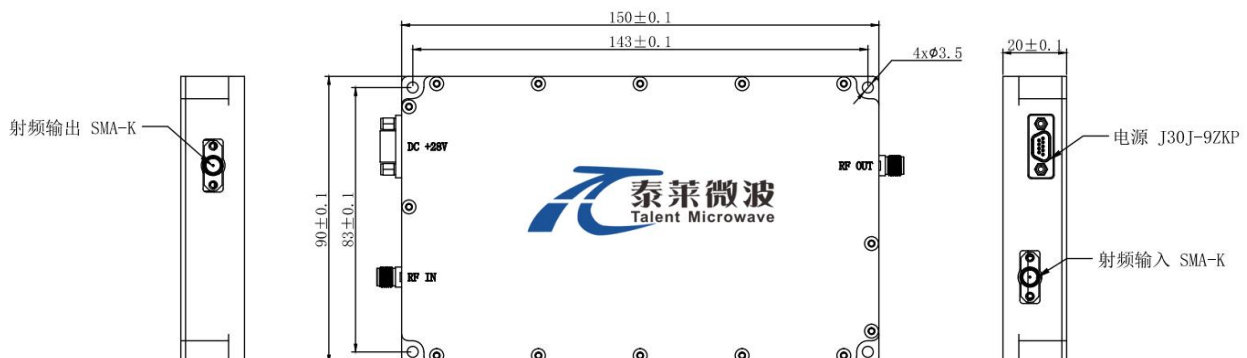
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	J30J-9ZKP	
Size	150*90*20	mm
Weight	≤1	Kg

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

DC Supply Connector(J30J-9ZKP):

Pin	Function	Pin	Function
1~2	NC	5*	TTL-SWITCH
3	CURRENT SENSOR	6~7	+28V
4	TEMP SENSOR	8~9	GND

*Note: 'High' DC power setting on,'Low' DC power setting off.

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
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