

Power Amplifier

18-40GHz /40dB Gain/40 dBm Psat

Model: TLPA18G40G-40-40

TLPA18G40G-40-40 is a power amplifier with power gain of 40 dB and a nominal Psat of 41 dBm across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +18 VDC/11 A. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Ultra Wide Band: 18-40GHz
- Gain: 40dB Min
- Output Power Psat: 40dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

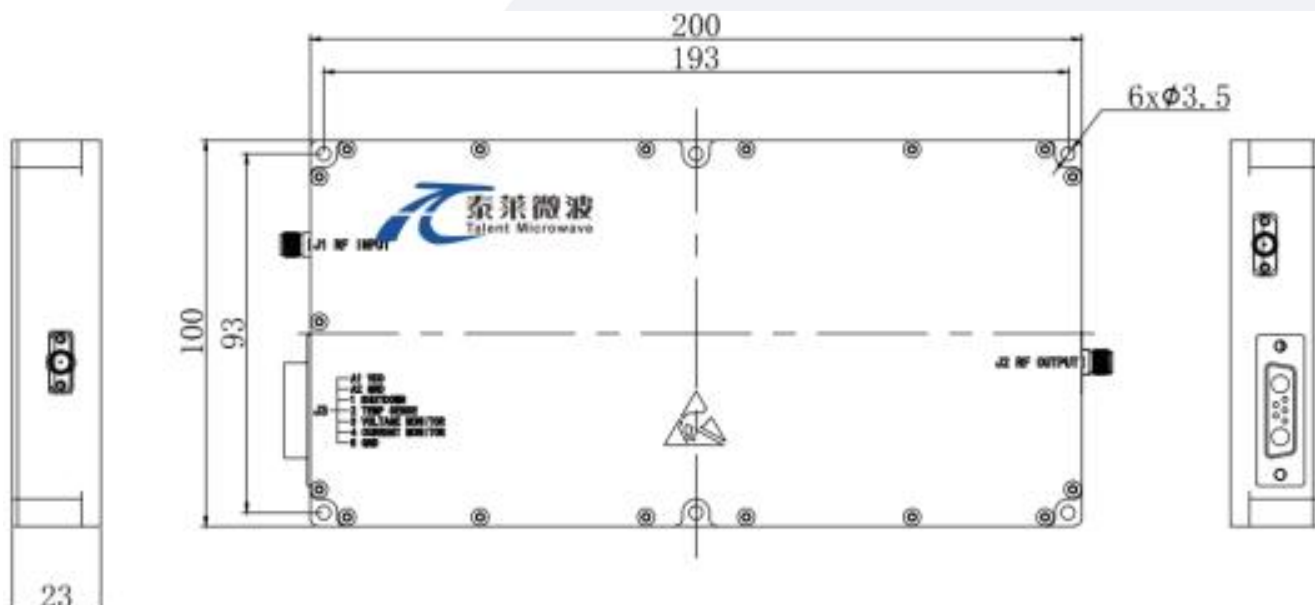
Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	18-40			GHz
Power Gain	40			dB
Output P1dB		32		dB
Output Psat	40	41		dBm
Spurious			-50	dBc
Harmonics			-15	dBc
Input VSWR		2	2.5	:1
DC Voltage		18	19	V DC
DC Supply Current		11		A
Impedance	50			Ohms

Parameter	Value	Units
Input /Output Connector	2.92 Female/2.92 Female	
DC Supply Connector	SUB-7W2	
Size	200*100*23	mm
Weight	3	Kg

Parameter	Value
Supply Bias Voltage	+19V
RF Input Power	10dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Unit:mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

DC Supply Connector(D-SUB7W2):

Pin	Function
A1	+18V
A2	GND
PIN1	TTL(high for open, low for close)
PIN2	Current Monitor
PIN3	Temperture Monitor
PIN4/5	GND

Environmental Conditions:

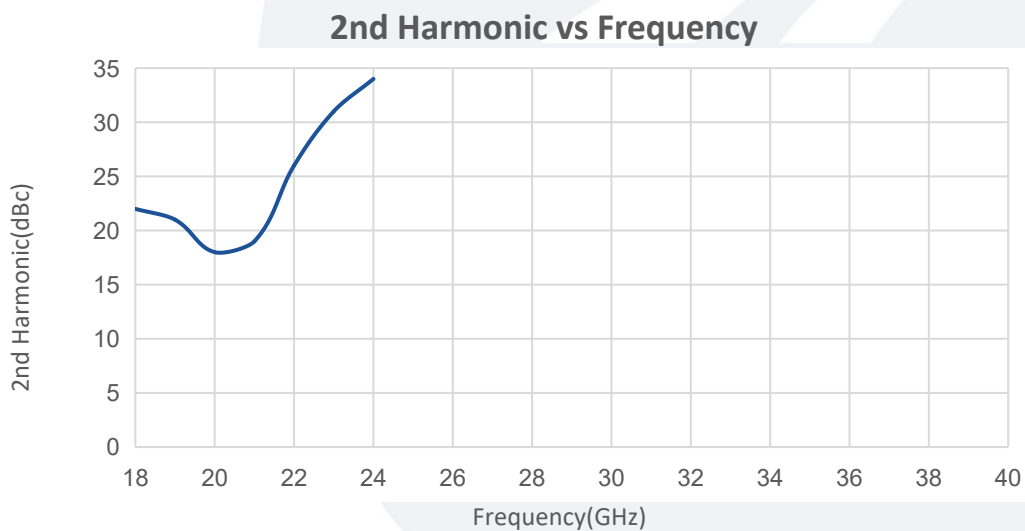
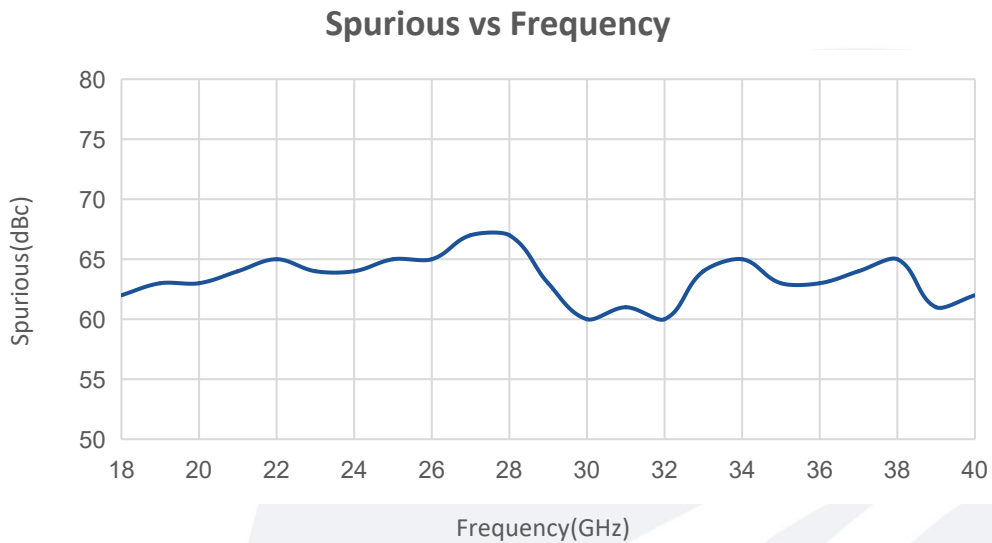
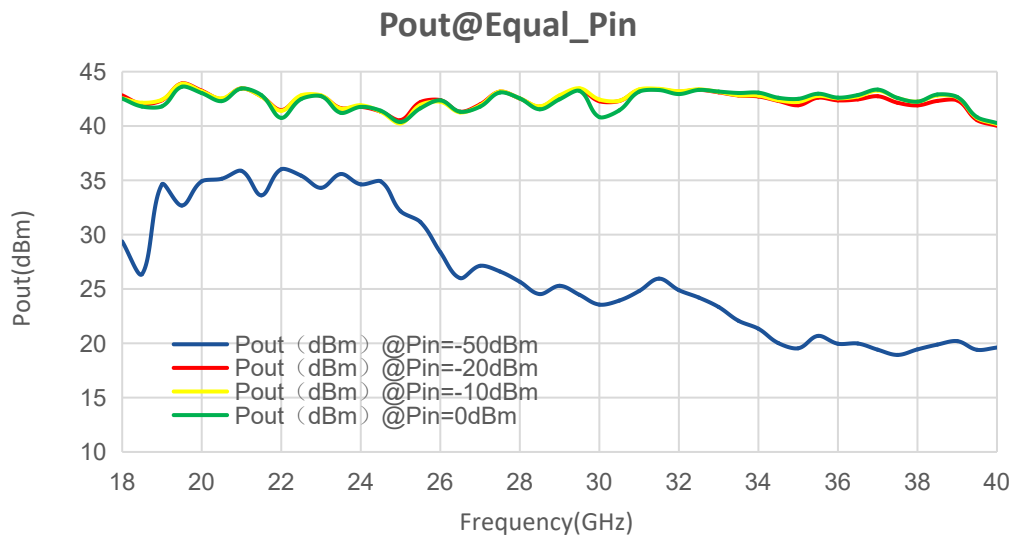
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	°C
Non-operating Temperature*	-50		+60	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TLPA18G40G-40-40	Power amplifier 18-40GHz,Gain:40dB,Psat:41dBm, +18V DC,Without Heatsink	Rev.1.1
TLPA18G40G-40-40-HS	Power amplifier 18-40GHz,Gain:40dB,Psat:41dBm, +18V DC,With Heatsink	Rev.1.1

Typical Performance Data:



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.