

Model:TLPA300M6G-40-30

Power Amplifier

0.3-6GHz,Gain:40dB,P1dB:30dBm

Feature:

- Ultra Wide Band: 0.3-6GHz
- Gain:40dB Min
- P1dB Output Power:30dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.3-6			GHz
Gain	40	42		dB
Gain Flatness		±0.5	±1	dB
Output P1dB	30	31		dBm
Output Psat		32		dBm
Input VSWR		1.8		:1
Harmonics@Pout=30dBm		-15		dBc
DC Voltage		+12	+15	V DC
DC Supply Current		700	1000	mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	100*50*15	mm
Weight	150	g

Absolute Maximum Ratings:

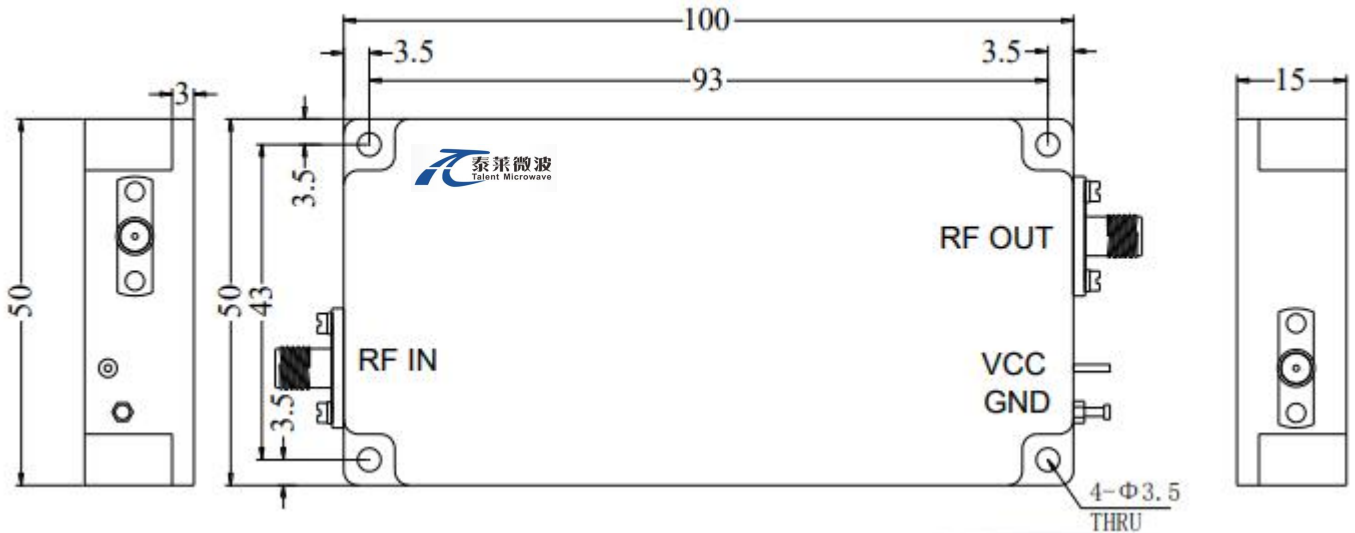
Parameter	Value
Supply Bias Voltage	+15V
RF Input Power	0dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

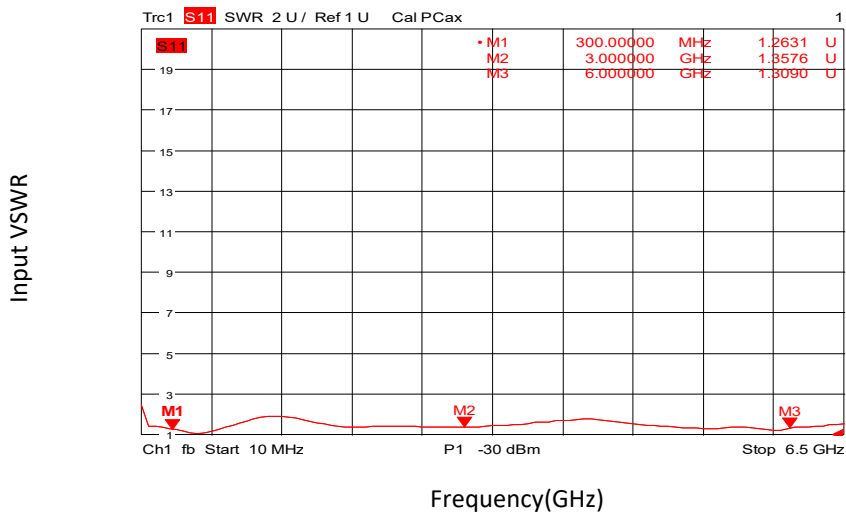
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

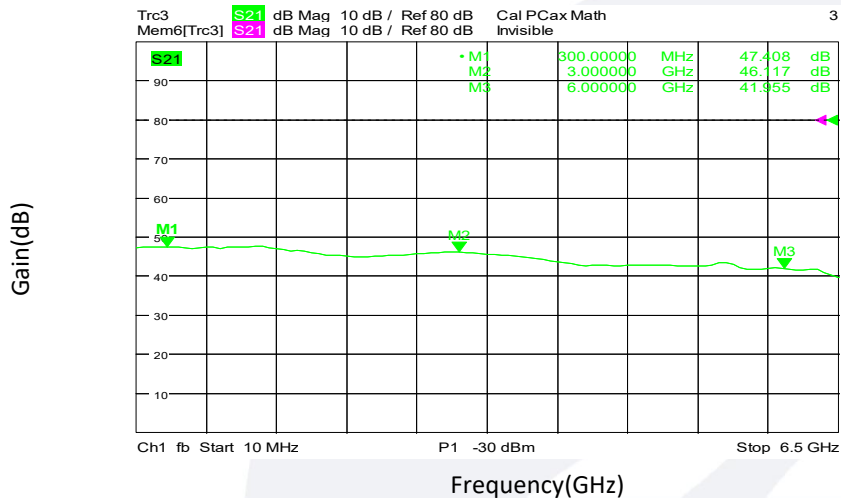
Part Number	Description	Revision
TLPA300M6G-40-30	Power amplifier 0.3-6GHz,Gain:40dB,P1dB:30dBm,+12V DC,Without Heatsink.	Rev.1.1
TLPA300M6G-40-30-HS	Power amplifier 0.3-6GHz,Gain:40dB,P1dB:30dBm,+12V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

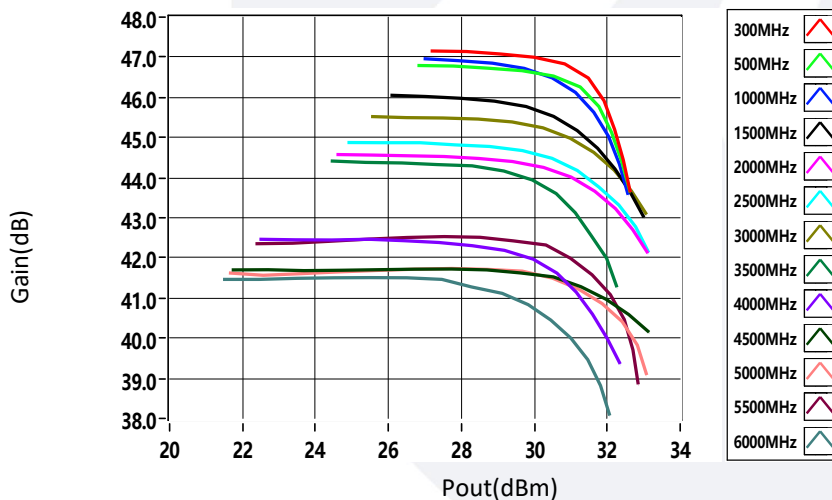
Input VSWR vs Frequency



Gain vs Frequency

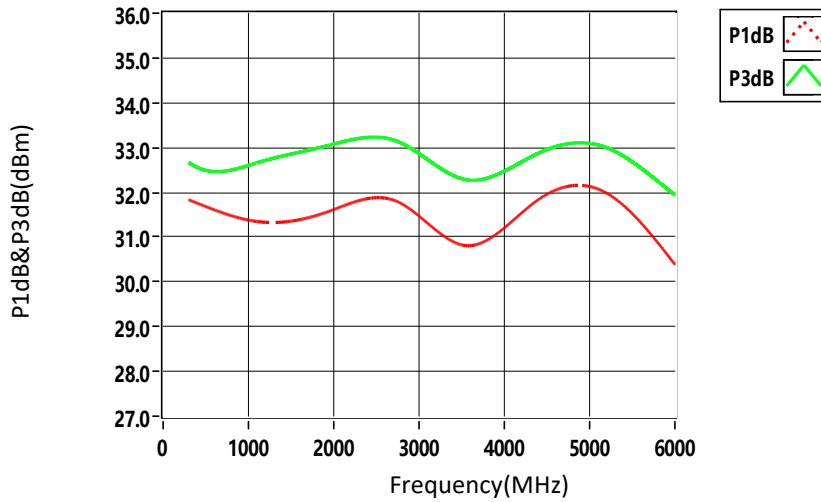


Gain vs Output Power

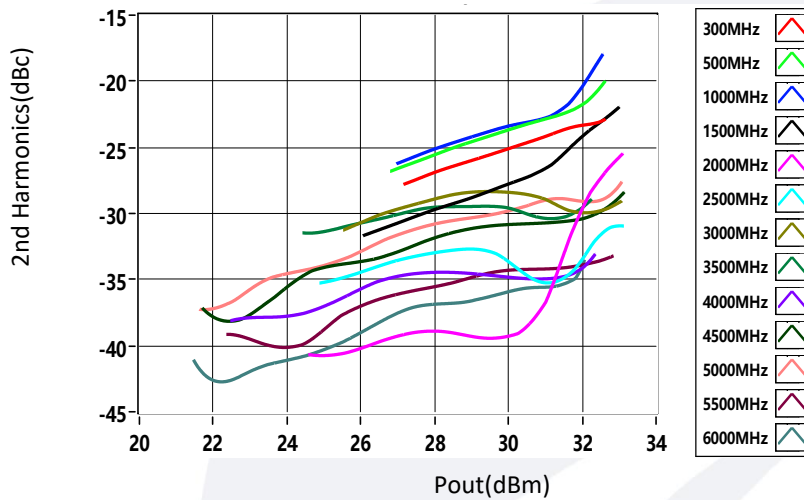


Typical Performance Data:

P1dB&P3dB vs Frequency



2nd Harmonics VS Output Power



3rd Harmonics VS Output Power

