Suzhou Talent Microwave,Inc
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Power Amplifier

10MHz-1GHz/35dB Gain/40dBm Psat

Model: TLPA10M1G-35-40

TLPA10M1G-35-40 is a power amplifier with a typical small signal gain of 35 dB and a nominal Psat of 40 dBm across the frequency range of 10 MHz to 1 GHz. The DC power requirement for the amplifier is +28 VDC/0.2 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 10MHz-1GHz
- Gain: 35dB Typ
- 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	10MHz		1GHz	
Small Signal Gain	32	35		dB
Gain Flatness		±2	±3	dB
Output P1dB	37	38		dBm
Output Psat	39	40		dBm
Harmonics			-10	dBc
Input VSWR		1.5	2.0	:1
DC Voltage	+26	+28	+30	V DC
DC Supply Current		0.2	1.5	A
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	76*48*15(Without heatsink) 90*144*45(With heatsink)	mm
Weight	250	g

Absolute Maximum Ratings:

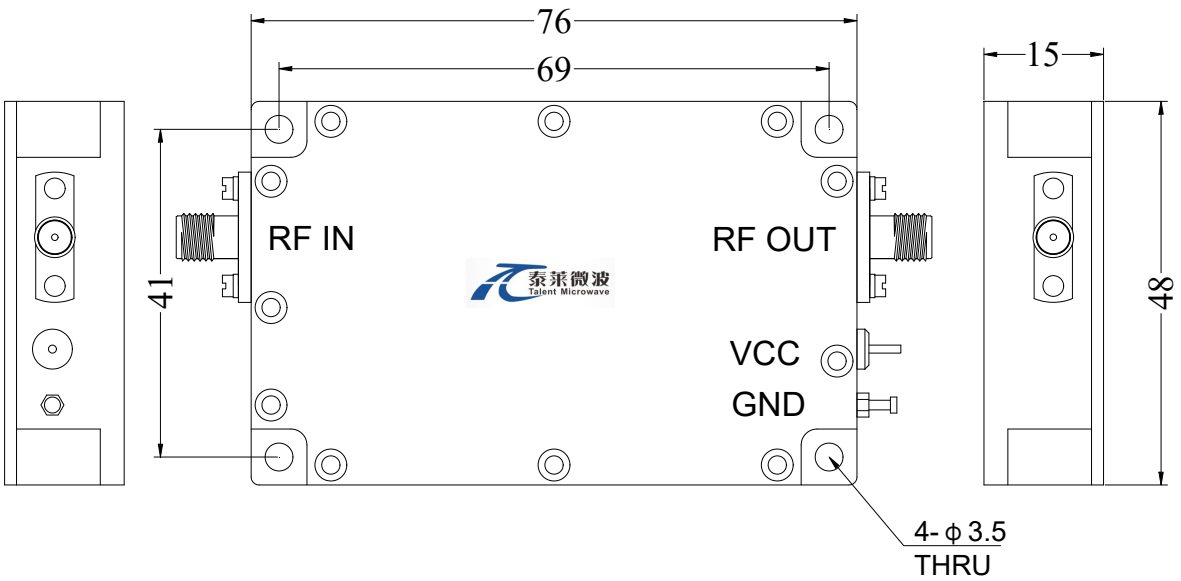
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



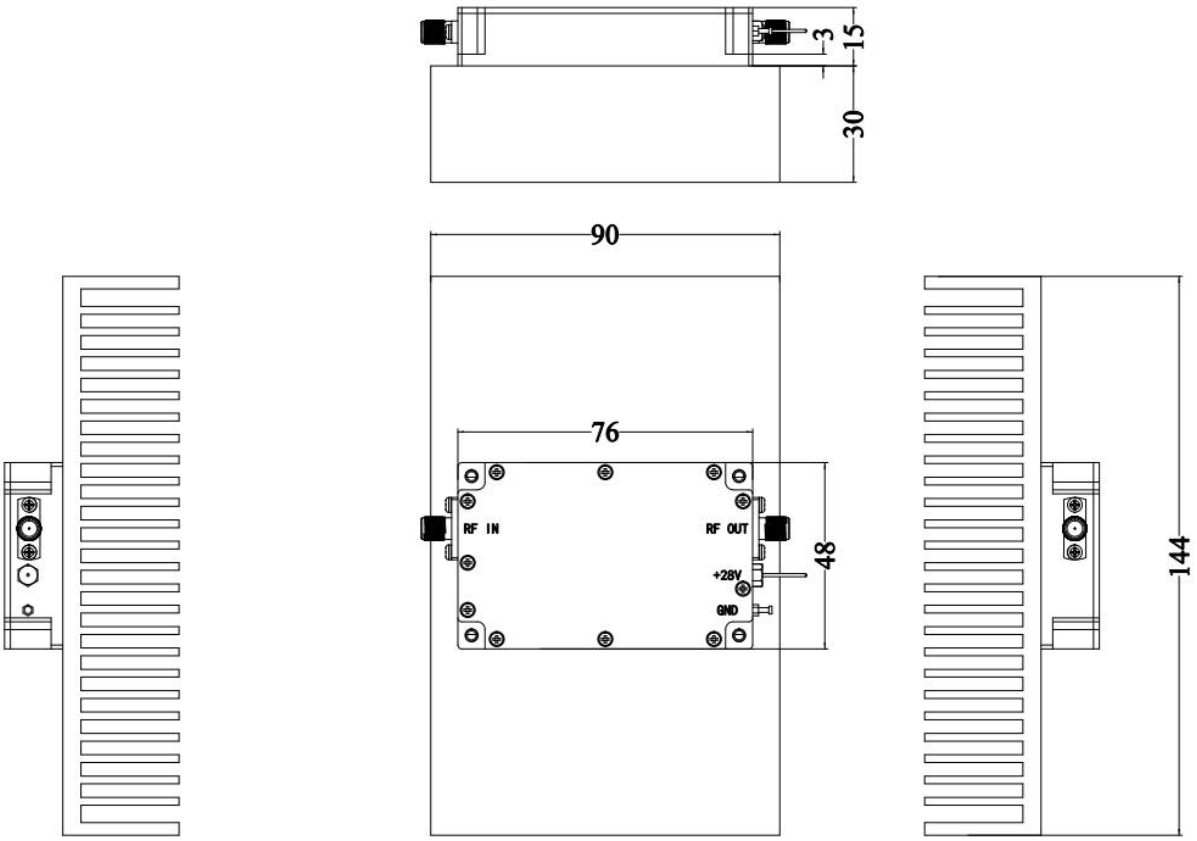
***Heat Sink Required During Operation

ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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.

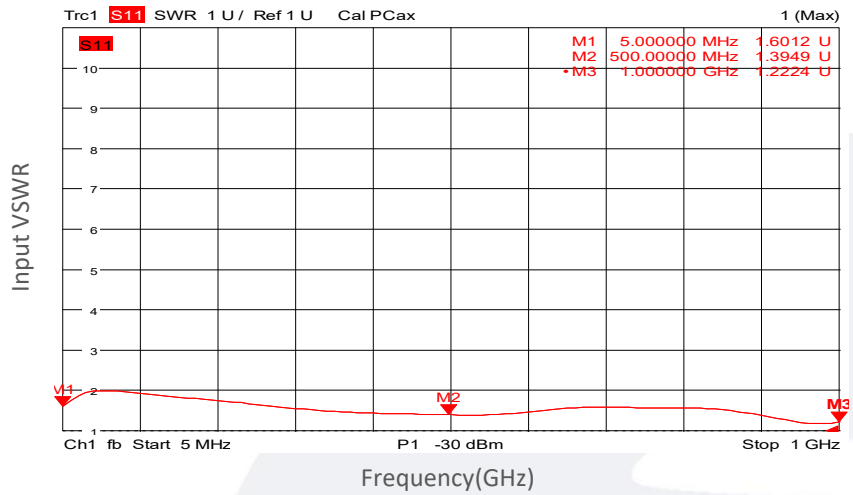
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Ordering Information:

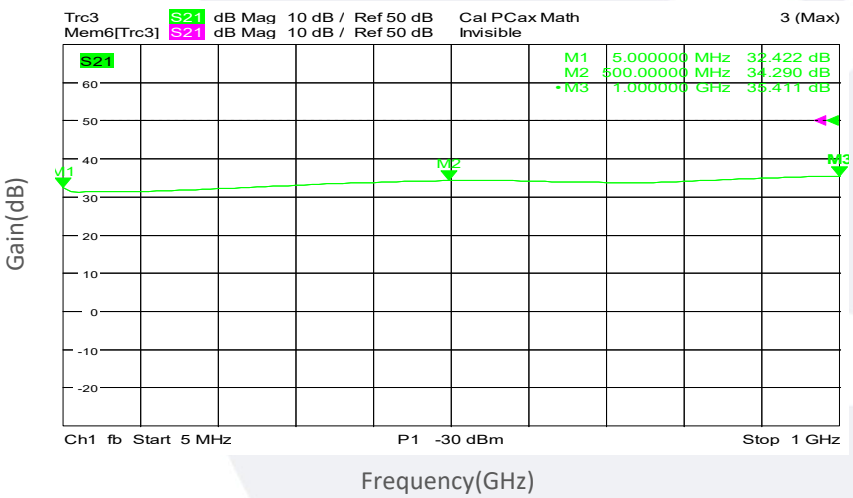
Base Number	Description	Revision
TLPA10M1G-35-40	Power amplifier 10MHz-1GHz, Gain:35dB,Psat:40dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA10M1G-35-40-HS	Power amplifier 10MHz-1GHz, Gain:35dB,Psat:40dBm,+28V DC,With Heatsink	Rev.1.1

Typical Performance Data:

Input VSWR vs Frequency



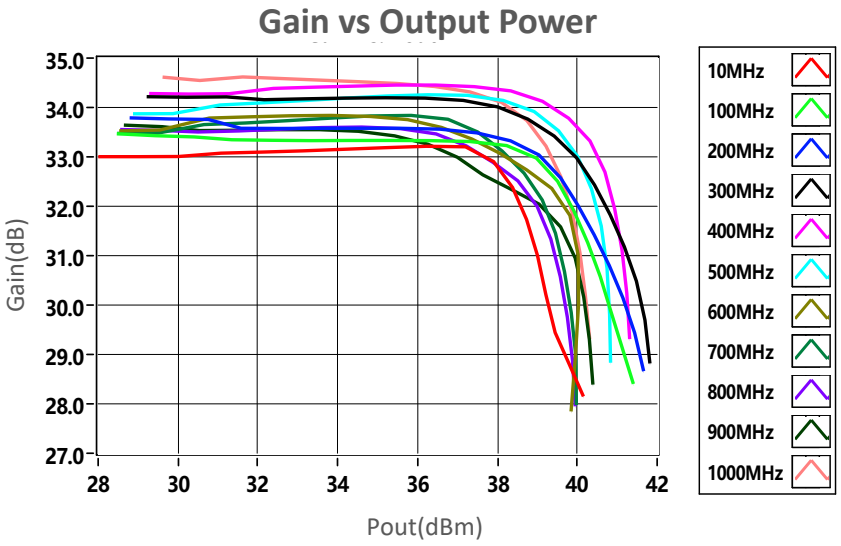
Small Signal Gain vs Frequency

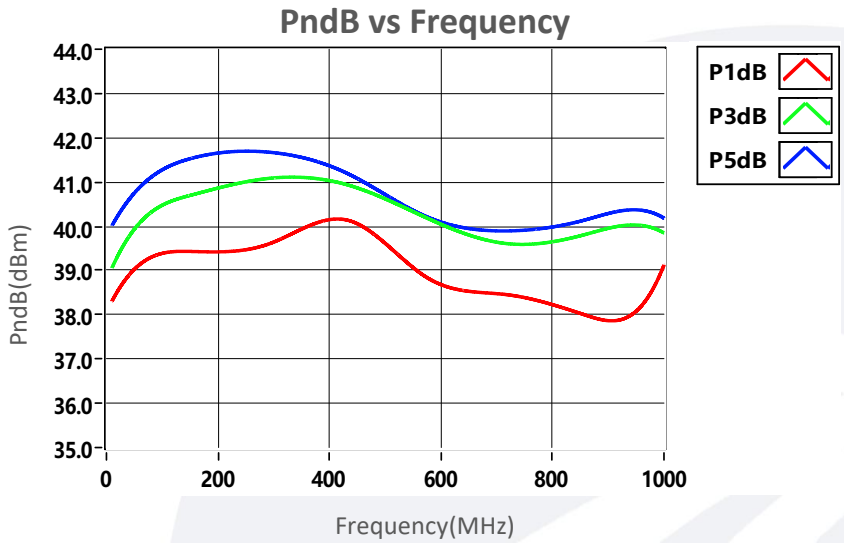


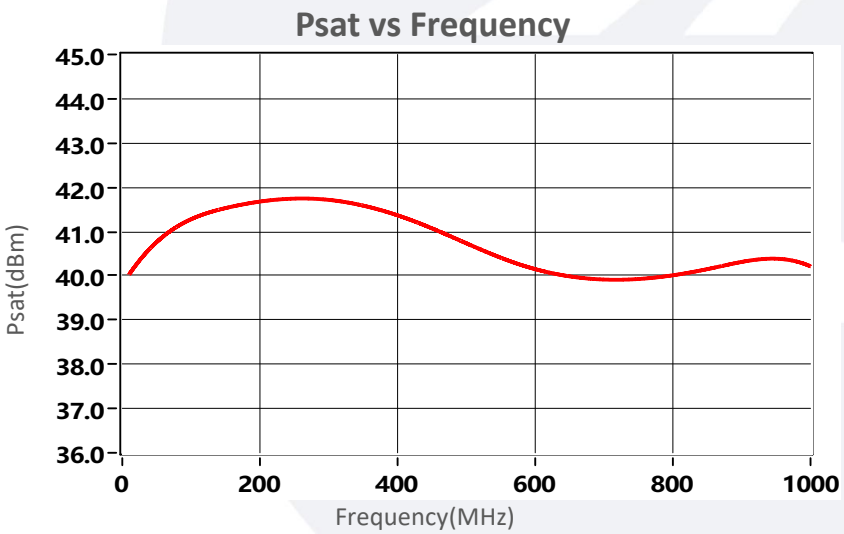
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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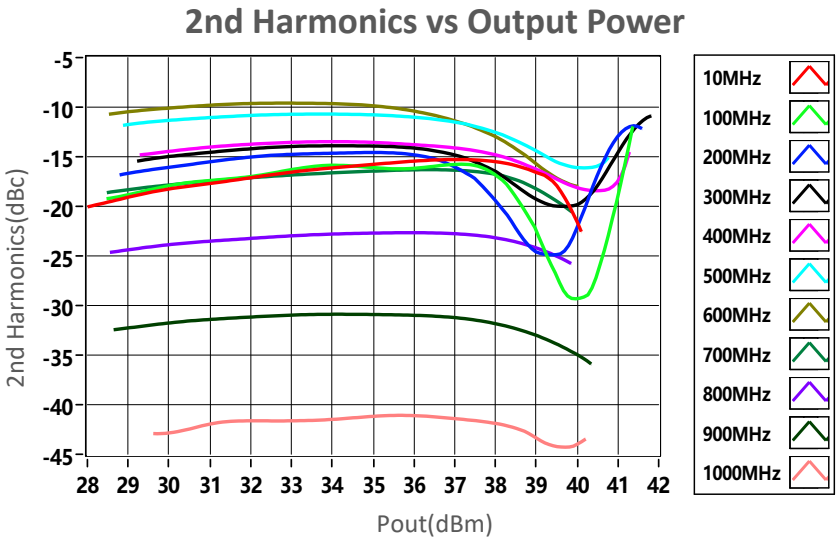


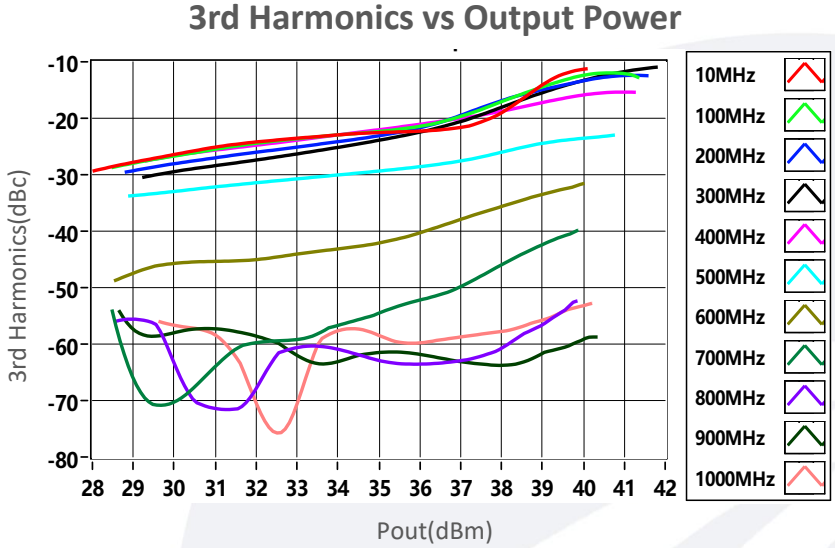


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