Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Power Amplifier

50-350MHz/33dB Gain/33dBm Psat

Model: TLPA50M350M-33-33

TLPA50M350M-33-33 is a power amplifier with a minimun small signal gain of 33 dB and a minimun Psat of 33 dBm across the frequency range of 50 to 350 MHz. The DC power requirement for the amplifier is +12 VDC/1000 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 50-350MHz
- Gain: 33dB Min
- Output Power Psat: 33dBm 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	50		350	MHz
Small Signal Gain	33	35		dB
Gain Flatness		±1	±2	dB
Output Psat	33	34		dBm
Input VSWR			1.5	:1
DC Voltage		+12		V DC
DC Supply Current		1000		mA
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	mm
Weight	200	g

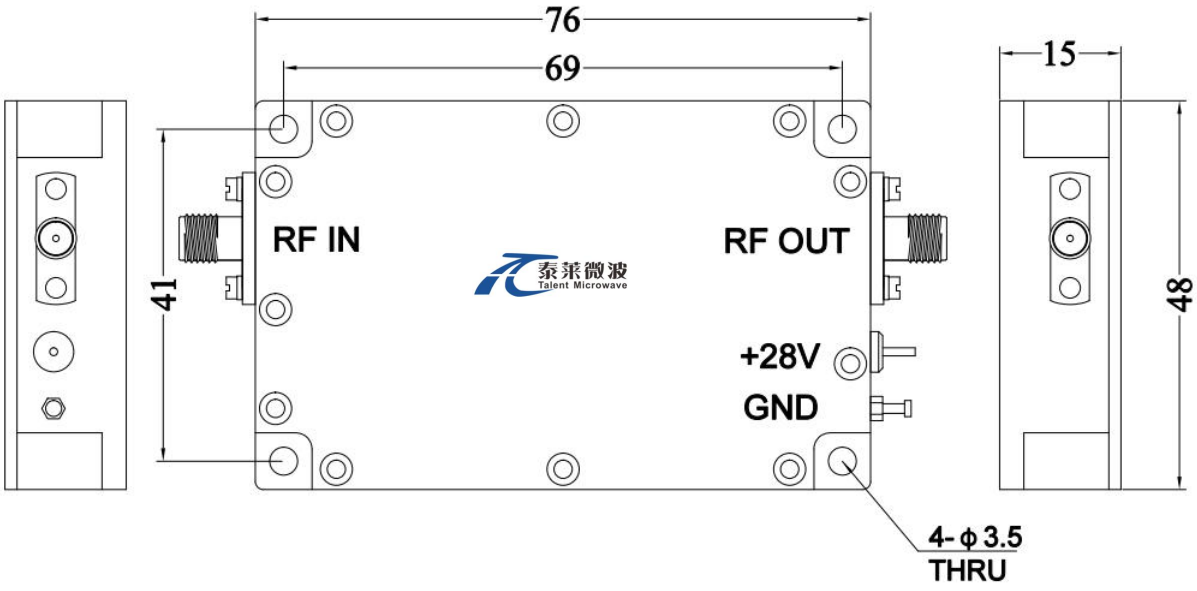
Absolute Maximum Ratings:

Parameter	Value
RF Input Power	0 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Simple 220V System
Available SAC option

Outline Drawing:

Unit:mm



***Heat Sink Required During Operation

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

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Environmental Conditions:

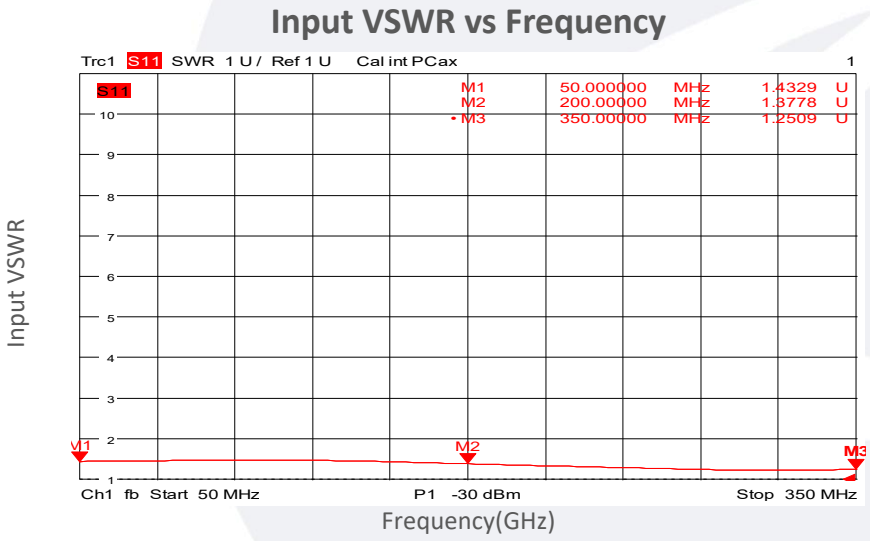
Parameter	Min	Typ	Max	Units
Operating Temperature*	-45		+85	℃
Non-operating Temperature*	-55		+125	℃
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA50M350M-33-33	Power amplifier 50-350MHz,Gain:33dB,Psat:33dBm, +12V DC,Without Heatsink.	Rev.1.2
TLPA50M350M-33-33-HS	Power amplifier 50-350MHz,Gain:33dB,Psat:33dBm, +12V DC,With Heatsink.	Rev.1.2

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.

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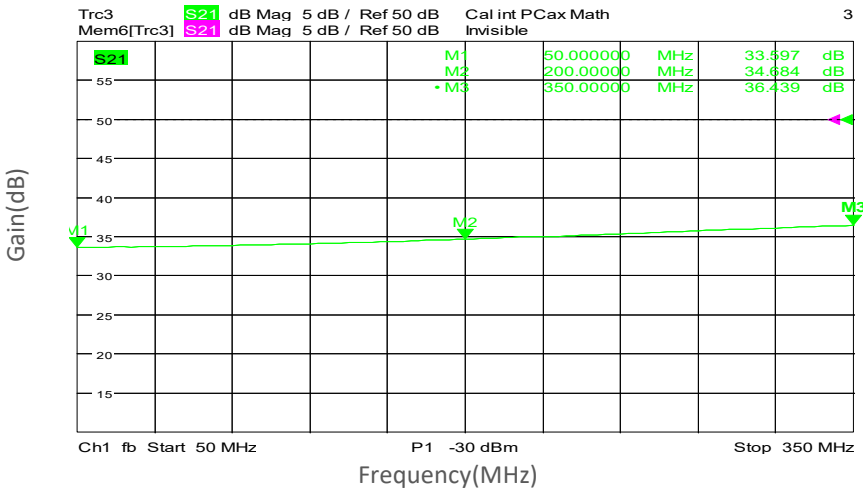
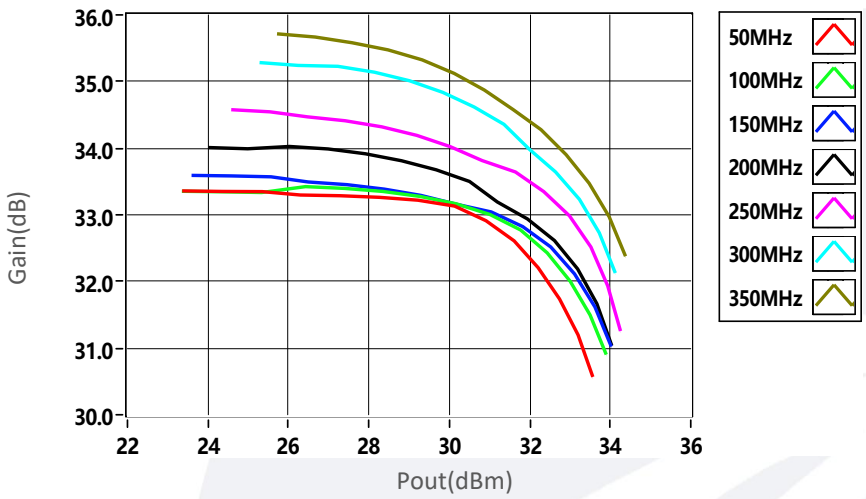
Typical Performance Data:

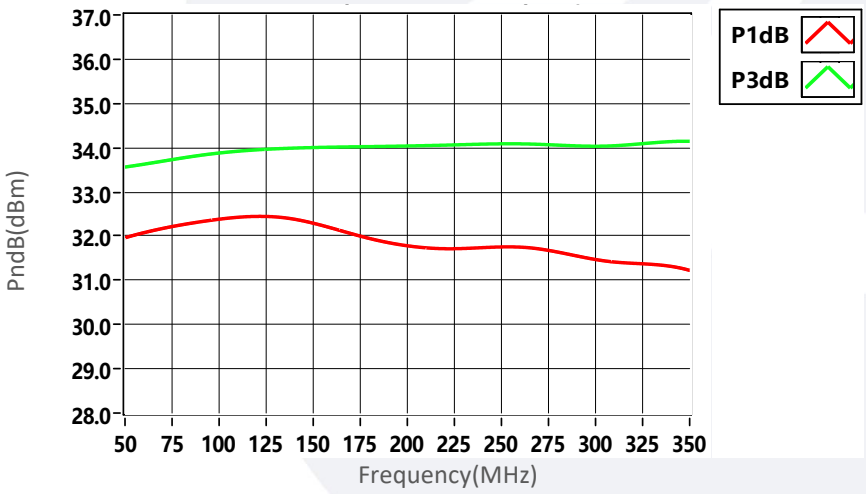
Small Signal Gain vs Frequency



Gain vs Output Power



PndB vs Frequency



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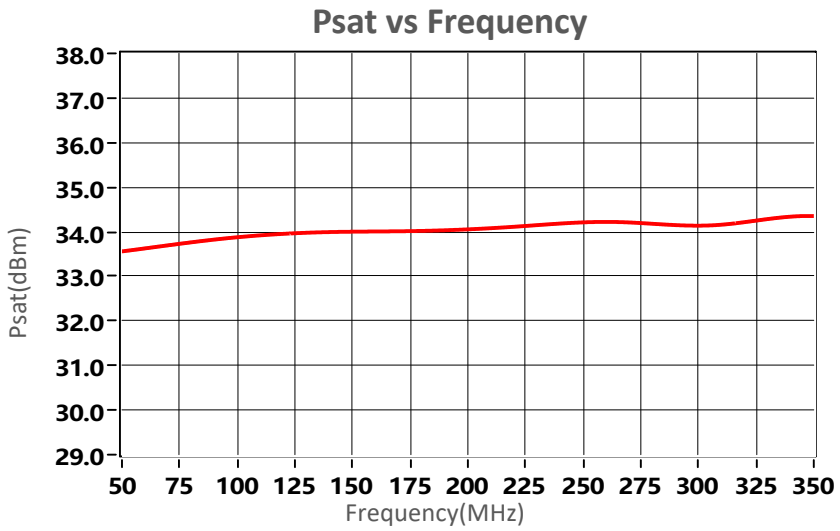

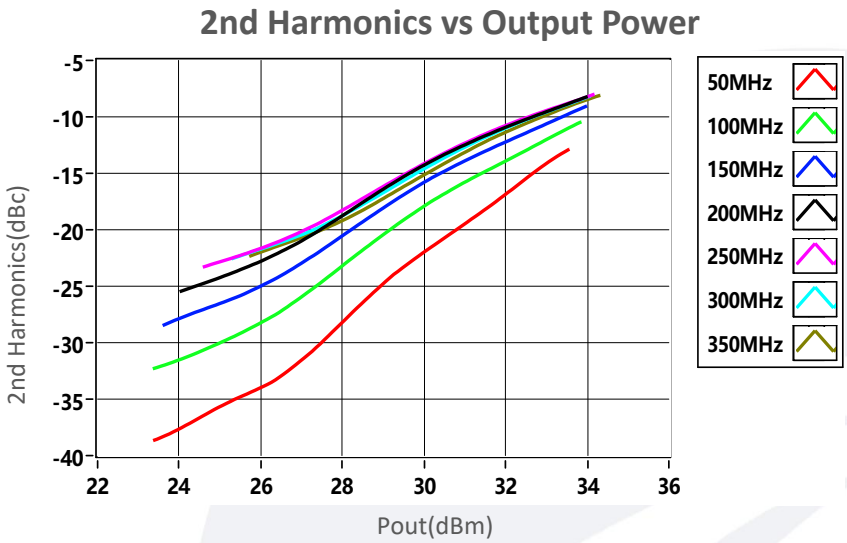

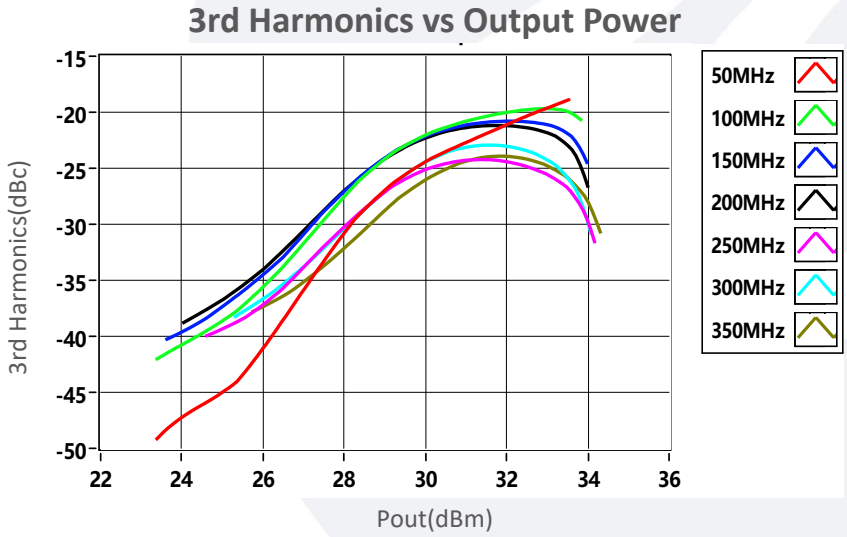

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