泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

0.1-22GHz /35dB Gain/32 dBm Psat Model: TLPA0.1G22G-35-33

TLPA0.1G22G-35-33 is a power amplifier with a typical small signal gain of 35 dB and Psat of 32 dBm across the frequency range of 0.1 to 22 GHz. The DC power requirement for the amplifier is +24 VDC/0.85 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.1-22GHz
- Small Signal Gain: 35dB Typ
- Output Power Psat: 32dBm 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	0.1		22	GHz
Small Signal Gain	33	35		dB
Gain Flatness		±2.5		dB
Output P1dB		30		dBm
Output Psat		32		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		24	25	V DC
DC Supply Current		850		mA
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
Size	60*65*11(Without Heatsink) 60*90*41(With Heatsink)	mm

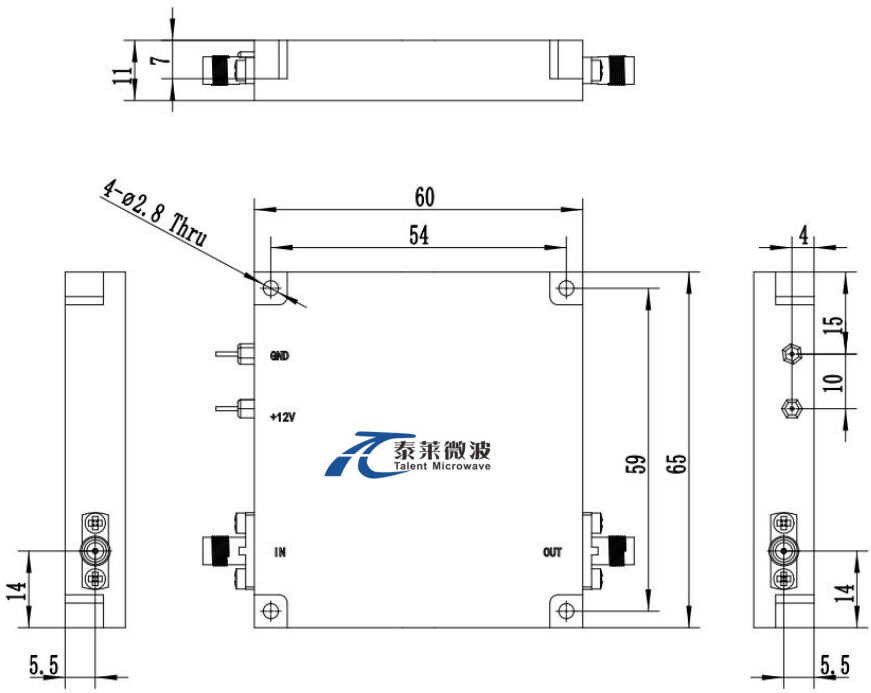
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+25V
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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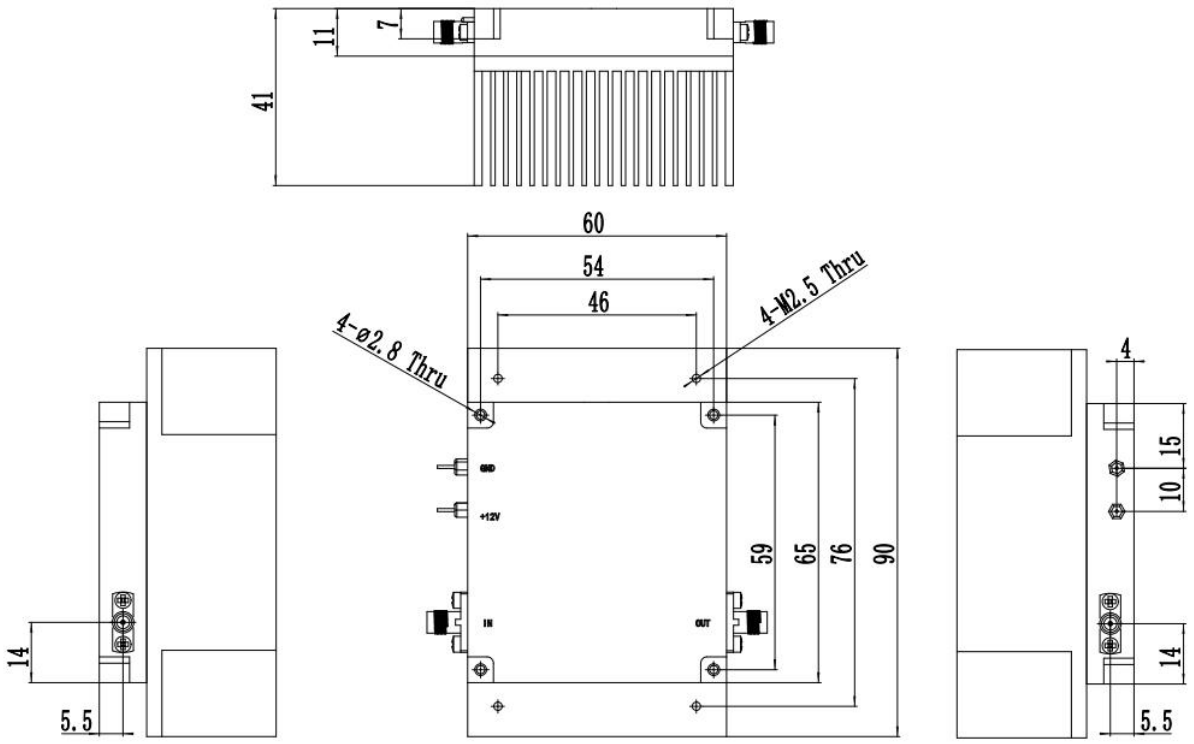
Outline Drawing:

Unit:mm



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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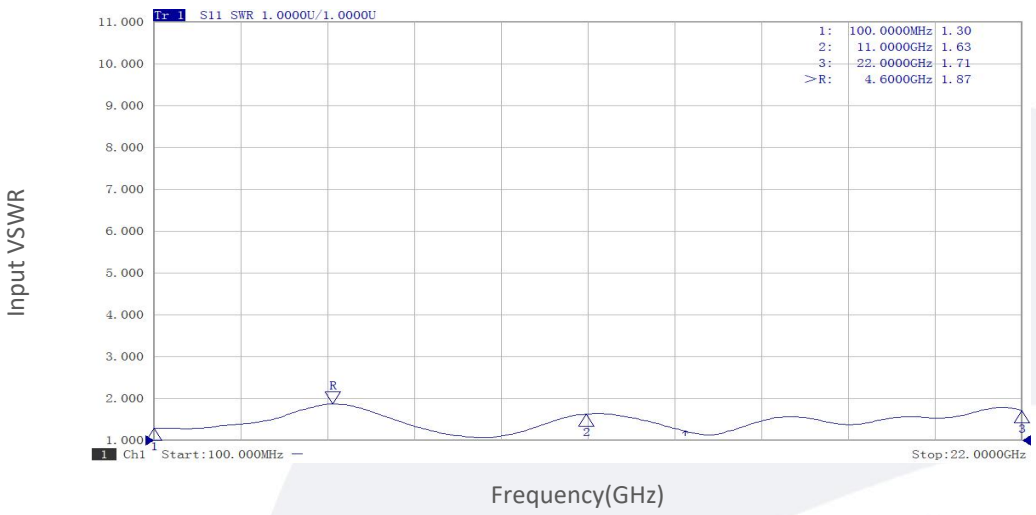
Ordering Information:

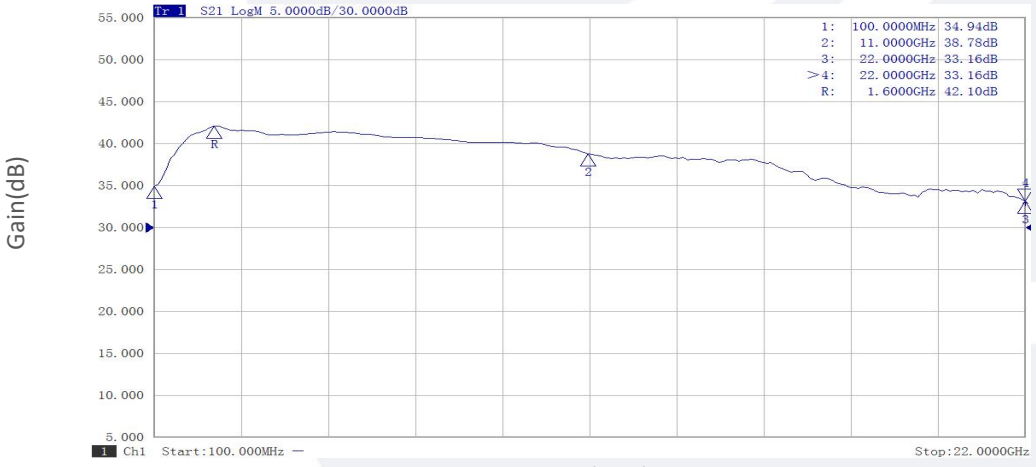
Base Number	Description	Revision
TLPA0.1G22G-35-33	Power amplifier 0.1-22GHz, Gain:35dB,Psat:32dBm,+24V DC,Without Heatsink	Rev.1.1
TLPA0.1G22G-35-33-HS	Power amplifier 0.1-22GHz, Gain:35dB,Psat:32dBm,+24V DC,With Heatsink	Rev.1.1

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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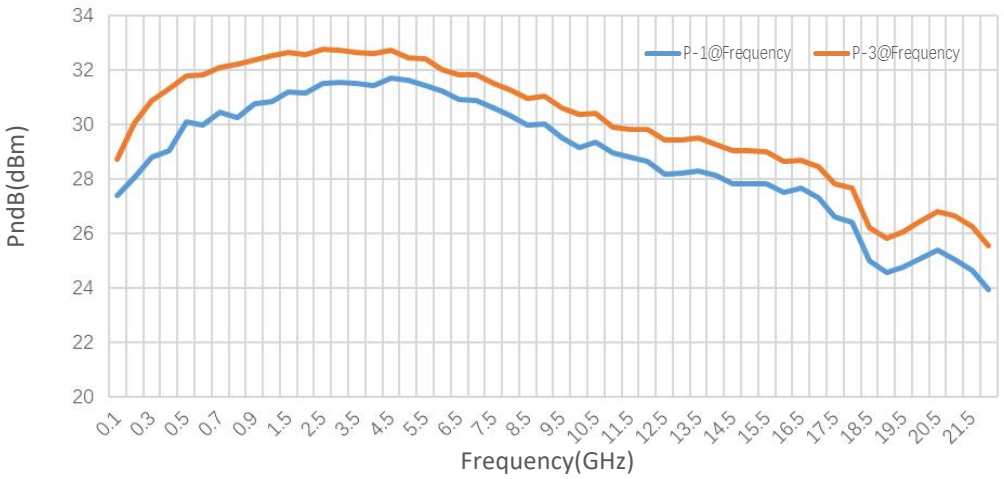
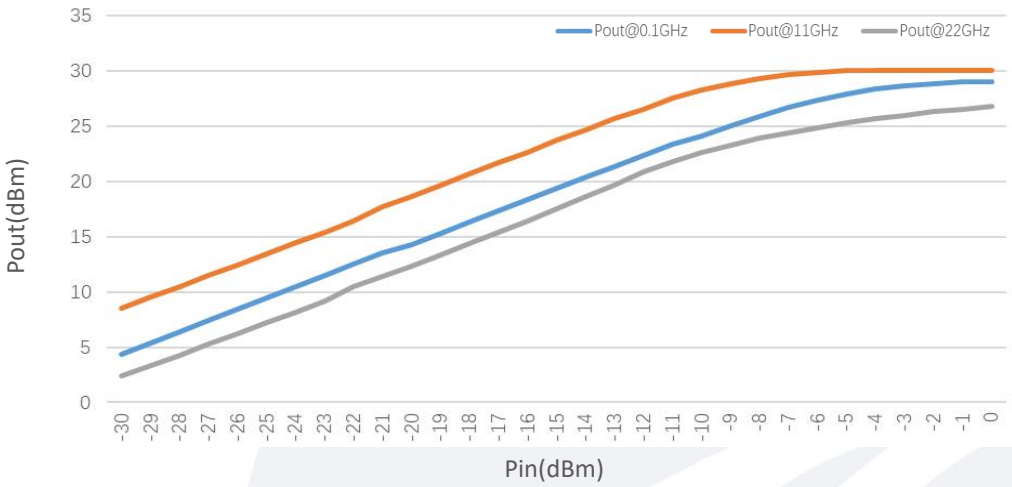
Typical Performance Data:

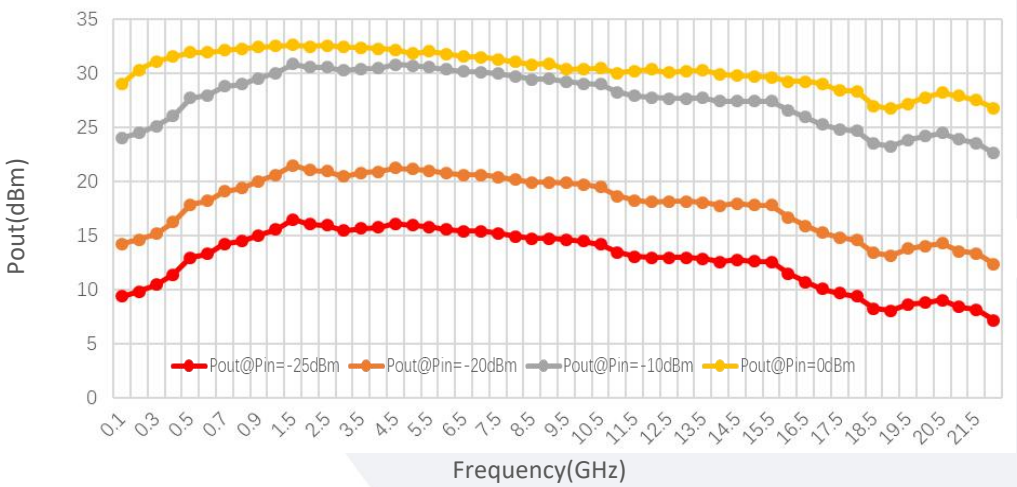
PndB vs Frequency



Pout@Pin



Pout@Equal_Pin



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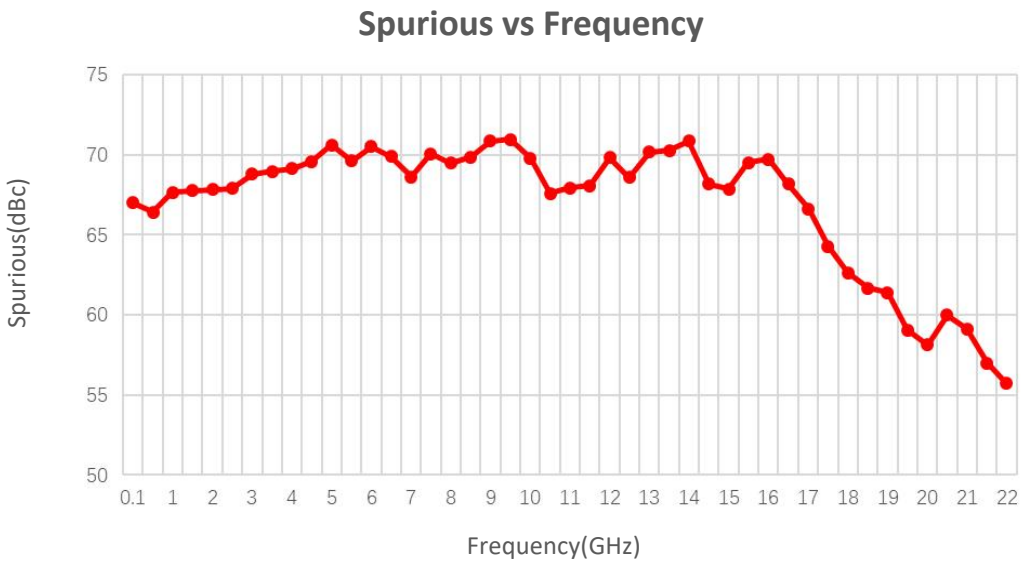

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