

Power Amplifier

60-110GHz/30dB Gain/8dBm Psat

Model: TMPA-060110-3505-1.0

TMPA-060110-3505-1.0 is a power amplifier with a typical small signal gain of 30 dB and a nominal Psat of 8 dBm across the frequency range of 60 to 110 GHz. The DC power requirement for the amplifier is +12 VDC/90 mA. The input and output port configuration offers coax adapter structure with 1.0mm female.

Features:

- Frequency range: 60-110GHz
- Gain: 30dB Typ
- Output Power Psat: 8dBm 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	60		110	GHz
Small Signal Gain		30		dB
Output Psat		8		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		12		V DC
DC Supply Current		90		mA
Impedance		50		Ohms

Mechanical Specifications:

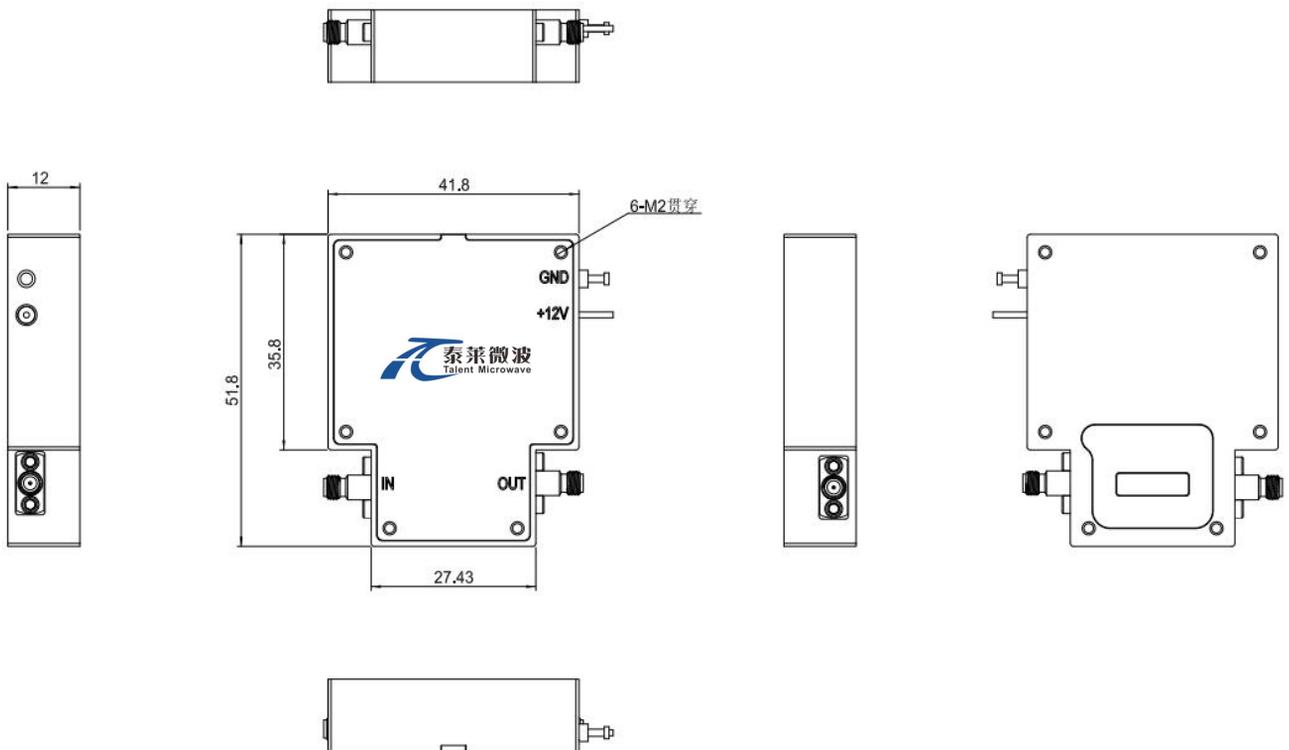
Parameter	Value	Units
Input /Output Connector	1.0mm Female/1.0mm Female	
DC Bias	Solder Pin	
Size	41.8*51.8*12	mm

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm



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



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

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-10		+65	°C
Non-operating Temperature*	-45		+85	°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			

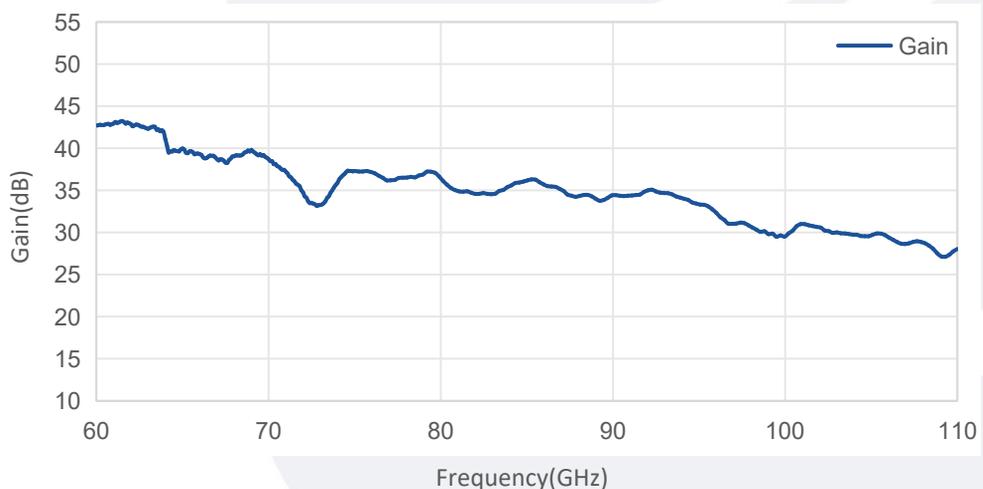
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TMPA-060110-3505-1.0	Power amplifier 60-110GHz, Gain:30dB,Psat:8dBm,+12V DC,Without Heatsink	Rev.1.0
TMPA-060110-3505-1.0-HS	Power amplifier 60-110GHz, Gain:30dB,Psat:8dBm,+12V DC,With Heatsink	Rev.1.0

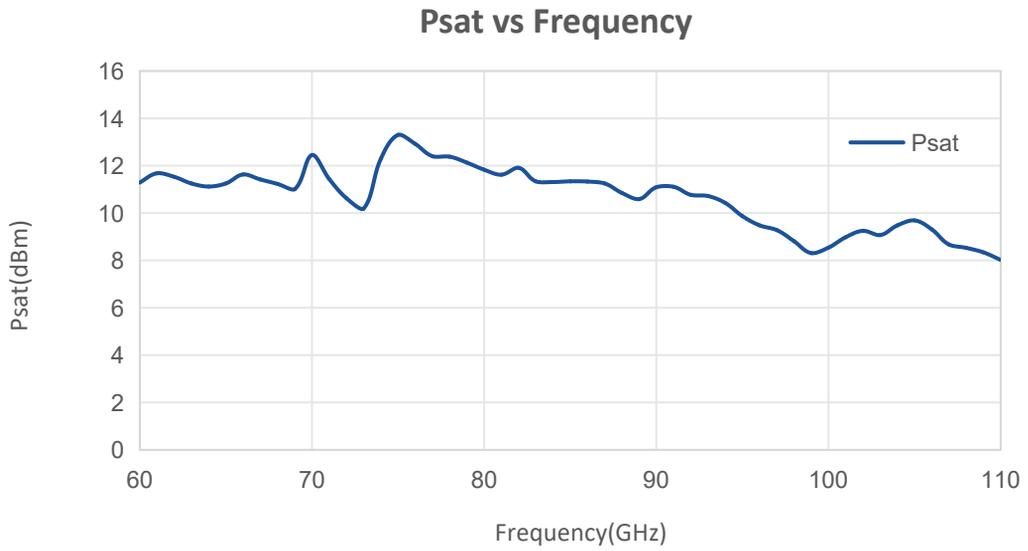
Typical Performance Data:

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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