

# MODEL HIPA18403527

## 18-40GHz Broadband Power Amplifier



Note: The photo is for illustration purposes only. Please refer to outline drawing

### ■ Features

- Ultra Wide Band: 18-40GHz
- Gain: 35dB
- Output Power Psat: 27dBm
- Bias: Vd=12V; Id=1A

### ■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems

### □ Electrical Specifications

Parameter	Min.	Typ.	Max	Units
Frequency Range	18-40			GHz
Small Signal Gain	30	35		dB
Gain Flatness		±2.5		dB
Input VSWER		2.0		-
Output VSWER		2.0		-
Output Power for 1 dB Compression (P1dB)		27		dBm
Saturated Output Power (Psat)		28		dBm
NF		6		dB
Input Max Power(no damage)			0	dBm
DC Current (Vcc=+12V) (@Pout=0.5W)		0.9	1.2	A
Impedance	50			Ω
Input Output Connector	2.92			
Material	Aluminium/Gold Painting			
Weight	200g			
Dimension	50X45X12mm			

### Environmental Conditions

<b>Operational Temperature</b>	-45°C~+85°C	<b>Vibration</b>	25g rms (15 degree 2KHz) endurance, 1 hour per axis
<b>Storage Temperature</b>	-55°C~+125°C	<b>Shock</b>	20G for 11msc half sin wave, 3 axis both directions
<b>Executive Standard</b>	MIL-STD-810G	<b>Humidity</b>	100% RH at 35c, 95%RH at 40°C

### Absolute Maximum Ratings

<b>Supply Bias Voltage</b>	+15V
<b>RF INPUT POWER</b>	0dBm
<b>ESD sensitivity (HBm)</b>	Class 0, passed 150V

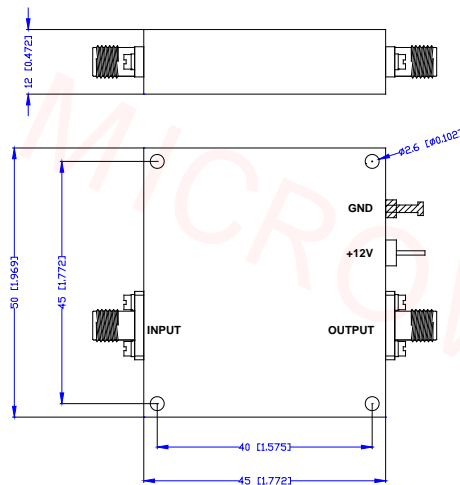


OBSERVE  
PRECAUTIONS  
ELECTROSTATIC  
SENSITIVE  
DEVICES



### Outline Drawing

All Dimensions in mm ( inches ) Tolerance  $\pm 0.25$  ( 0.01 )



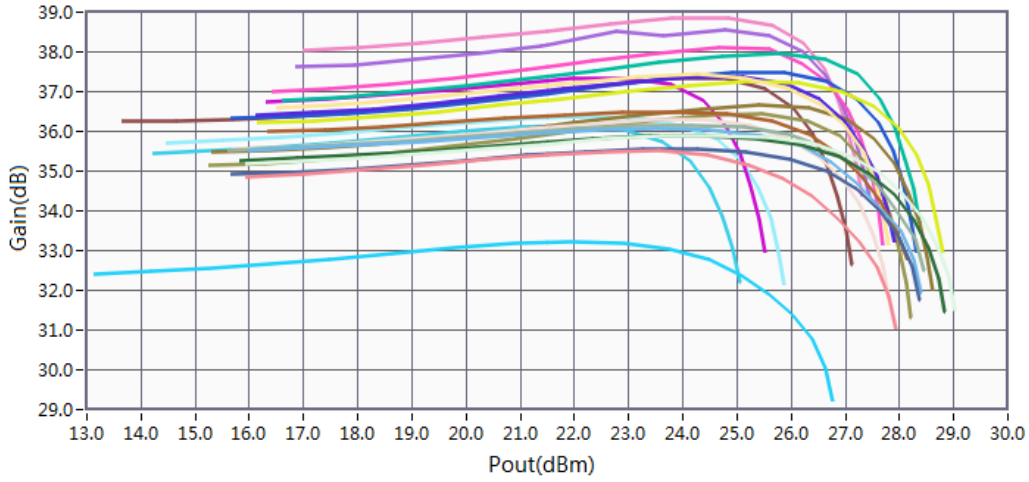
**\*\*\*Heat Sink required during operation\*\*\***



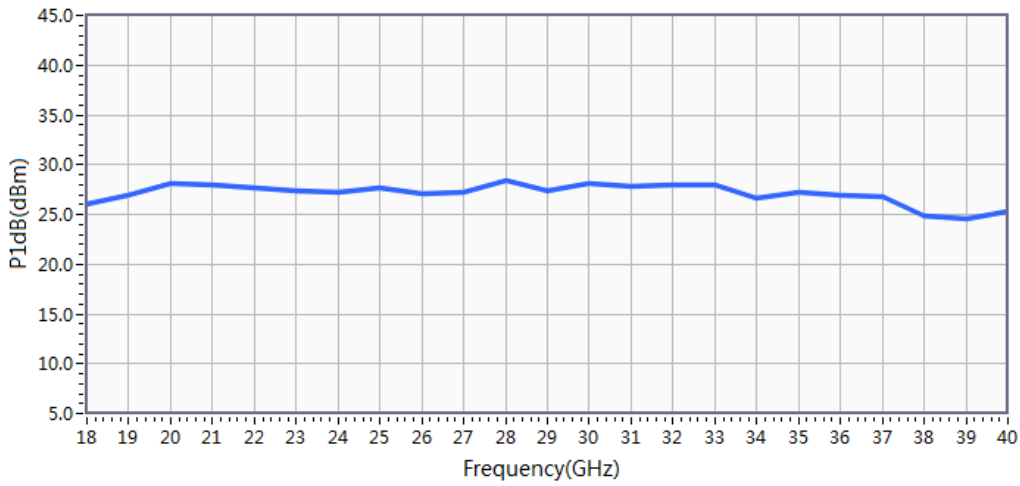
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Gain vs. Pout



P1dB vs. Frequency



P3dB vs. Frequency

