

# MODEL HIPA01044545

## 1.8-4.2GHz Broadband Power Amplifier



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

### ■ Features

- Ultra Wide Band: 1.8-4.2GHz
- Gain: 45dB
- Output Power Psat: 46dBm

### ■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems

### □ Electrical Specifications

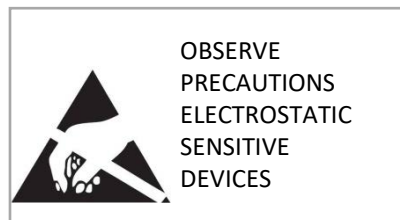
Parameter	Min.	Typ.	Max	Units
Frequency Range	1.8-4.2			GHz
Small Signal Gain	45	50		dB
Gain Flatness		± 1.5	± 2	dB
Input VSWR		1.4	2.0	
Output VSWR		1.3	2.0	
Output Power for 1 dB Compression (P1dB)	44	45		dBm
Saturated Output Power (Psat)	45			dBm
Non-Harmonic Spurious		60		dBc
Output third order intercept point		50		dBm
Input Max Power(no damage)			6	dBm
NF		10		dB
DC Current (Vcc=+28~30V) (@Pout=30W)		2000	3500	mA
Efficiency @ Pout=30W	40% typ			
TTL control	Enable: TTL "High" Disable: TTL "Low"			
Impedance	50			Ω
Input Output Connector	SMA-k/SMA-K			
Material	Aluminium			
Function	Over Current & Over temperature protection			
Package Sealing	General Sealing (Standard)			

### Environmental Conditions

<b>Operational Temperature</b>	-25°C~+65°C	<b>Vibration</b>	25g rms (15 degree 2KHz) endurance, 1 hour per axis
<b>Storage Temperature</b>	-45°C~+85°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

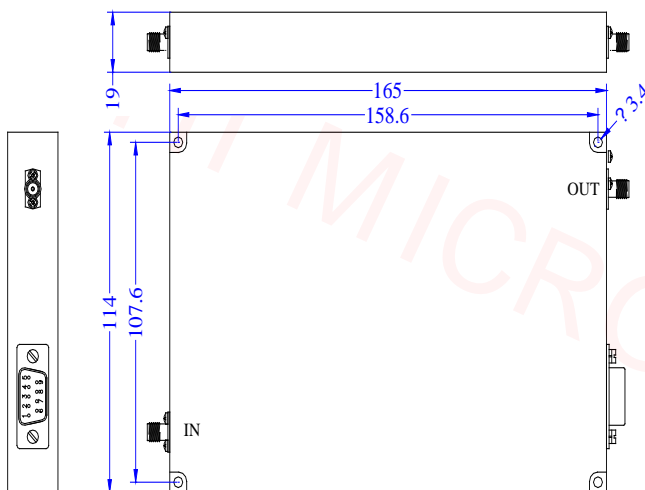
### Absolute Maximum Ratings

<b>Supply Bias Voltage</b>	+32V
<b>RF INPUT POWER</b>	+6dBm
<b>ESD sensitivity (HBm)</b>	Class 0, passed 150V



### Outline Drawing

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



Pin#	Pin Function
1,2	Vdc
3,4	GND
5	Enable: TTL "High" Disable: TTL "Low"
6	VVA Preferable (optional)
7,8,9	NC

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