

MODEL HIPAT4014040

0.4-1GHz 10W Power Amplifier



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

■ Features

- Ultra Wide Band: 0.4-1GHz
- Gain: 40dB
- Output Power Psat: 40dBm
- Bias: Vd=28V;Id=3A

■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems

□ Electrical Specifications

Parameter	Min.	Typ.	Max	Units
Frequency Range	0.4-1			GHz
Small Signal Gain		40		dB
Gain Flatness		±2		dB
Input VSWR			-10	-
Saturated Output Power (Psat)		40		dBm
Input Max Power			10	dBm
Harmonics@10W		-15		dBc
Spurious Signals		-60		dBc
DC Current (Vcc=+28V) (@Pout=10W)		3		A
DC Interface Connector		D-Sub 9-Pin, Male		
Input Output Connector	SMA Female			
Coling	External Heatsink (Not Supplide)			
Impedance	50			Ω
Dimensions	150*90*27 (5.9*3.6*1.1)			mm (inch)

Environmental Conditions

Operational Temperature	-20°C~+60°C	Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Storage Temperature	-55°C~+125°C	Shock	20G for 11msc half sin wave, 3 axis both directions
Executive Standard	MIL-STD-810G	Humidity	100% RH at 35c, 95%RH at 40°C

Absolute Maximum Ratings

Supply Bias Voltage	+30V
RF INPUT POWER	10dBm
Load VSWR@POUT=5W	∞@all load phase & amplitude for duration of 30 minute; 3:1@all load phase & amplitude continuons
Thermal Overload	85°C shutdown



1	VDD	28Vdc
2	VDD	28Vdc
3	VDD	28Vdc
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	CURRENT MONITOR	Analog voltage relative to Idd@100mV per Ampere
8	TEMP SENSE	Analog voltage relative to Module Temperature @10mV/°C
9	ENABLE	Amplifier Disable:TTL Logic High (3.3V)(Internally Pulled-low)

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

Outline Drawing

All Dimensions in mm (inches) Tolerance ± 0.25 (0.01)

