AMT-A0408 24.5 GHz to 26.5 GHz
Broadband Flat Gain w medium power amplifier

Data Sheet

Features

- 24.5 GHz to 26.5 GHz Frequency Range
- Gain 22 dB Typical
- Gain Flatness ± 1 dB
- 5 dB Typical Noise Figure
- Typical P1dB power > +28 dBm
- Internally Regulated
- Operates from Single +8V Supply
- Unconditionally Stable
- Available in Hermetic Laser sealed version

Laser Sealed Hermetic

Description

The AMT-A0408 is a Broadband flat gain with P1dB of +28 dBm medium power amplifier in a compact size. The performance is achieved through the use of AMTI's proprietary matching technology and latest in GaAs technology. The amplifier I/Os are Internally matched to 50 Ohms and DC Blocked. The AMT-A0408 is ideal for use as medium power e for test equipment, Communication systems or where broadband amplification and power are required in a Hi-Rel communications system for Commercial or Military applications

Applications

- Test Equipment
- Transmitter
- Communication Systems
- EW Systems
- Lab Applications
- Radar

MAXIMUM RATINGS[1]

Parameter	Symbol	Units	MIN	MAX
Operating Temperature – Case	T_{MO}	° C	-20	+65
Storage Temperature - Case	T_{MS}	° C	-40	+125
RF Input power (CW)	Pin	dBm		+
Die $T_{Junction}$	T_J	° C		+150
Positive Supply Voltage	V_{+SS}	V		+12

Appropriate Heat sink must be used, DO NOT APPLY DC TO RF INPUT

1.Stresses above those listed under "Absolute Maximum Rating" may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

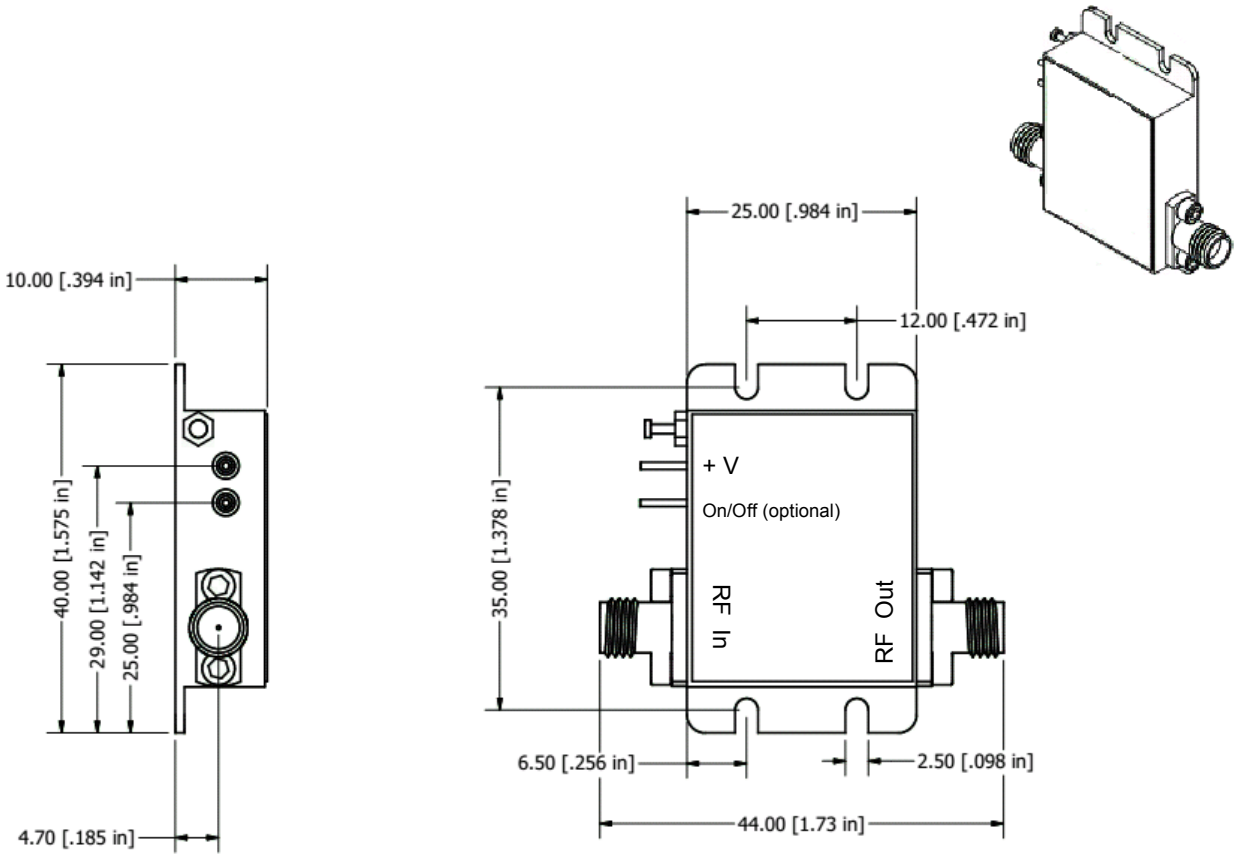
ELECTRICAL SPECIFICATIONS @ 23ºC

Parameter	Conditions	Units	MIN	Typical	MAX
Frequency Range		GHz	24.5		26.5
Gain	Small Signal	dB	21	22	24
Gain Flatness		dB		±1	±1.5
Noise Figure		dB		5	5.6
Output Power (P1dB)	measured @24.5, 25.5 and 26.5 GHz	dBm	+27	+28	
OIP3	OPI3 @ 25.5 GHz Two tone F1-F2= 10MHz	dB	+35		
RF Input Power		dBm	+20		
RF Input Impedance	Reference to 50 ohms VSWR			1.8:1	2.0:1
RF Output Impedance	Reference to 50 ohms VSWR			1.8:1	2.0:1
Supply Voltage Positive: Supply Current Positive:	 Small signal	V mA		+8 550	 650

Notes:
1/ Unconditional Stability
2/ NF uncertainty of 0.1 dB per Agilent/HP equipment manufacturer

Customized configurations of the above specifications are available

Package Outline M020: 2.9mm Female Connectors mm(inches)



Field replaceable 2.92mm Female Connectors, Removable Ground slug

Note: The unit must be attached to proper heat sink

Model Number	Description	Hermeticity	Package
AMT-A0408	SMA Female	Non-Hermetic	Outline: M020
AMT-A0408-H	SMA Female	Hermetic Laser Weld Tested to Leak Rate $<2.0x10^{-8}$	Outline: M020

Contact us for custom configurations and special requirements.

Our highly experienced team of engineers can quickly identify and implement innovative solutions using latest technology to improve performance and reduce cost.

- Add additional functionality: Input limiter, Temperature compensation, Amplitude/Phase matching, Amplitude/Phase Tracking, Automatic Gain control, Gain sloping, Bypass path, Specific supply voltage, Regulation, Power detector, Health status, and others

- Integrated: Filters, Switches, Limiter, Digital attenuator, Phase shifter, Microcontroller, Multiple amplifiers, Switch matrix, Comb generators and others

- Mechanical: Custom packages - Surface Mount, Connectorized, Waveguide, Carrier, Drop-in, Hermetic and others

Agile Microwave Technology Inc is the logical choice for all your commercial or military RF/Microwave components/module requirements.

Contact Information:

ISO 9001:2015
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