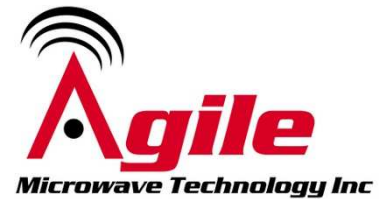


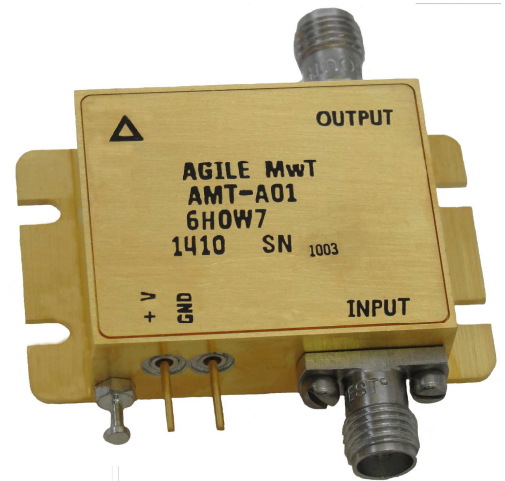
AMT-A0215 0.5 GHz to 18 GHz Broadband LNA/Med Power with 4W Protection Limiter



Data Sheet

Features

- 0.5 GHz to 18 GHz Frequency Range
- 4W Protection Limiter
- Gain 31 dB Typical
- Gain Flatness ± 1.5 dB Typical
- Typical P1dB power > + 27dBm
- 3 dB Typical Noise Figure
- Internally Regulated
- Operates from Single +12V Supply
- Unconditionally Stable



Description

The AMT-A0215 has +30 dBm protection limiter at input, low noise and +27 dBm P1dB Broadband 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 . The AMT-A0215 is ideal for use as high linearity LNA for test equipment, Communication systems or where broadband amplification and power are required without adding significant noise in a Hi-Rel communi-

Applications

- Radar
- Test Equipment
- EW Systems
- Lab Applications

MAXIMUM RATINGS¹

EAR99 NLR

Parameter	Symbol	Units	MIN	MAX
Operating Temperature – Case	T _{MO}	° C	-40	+75
Storage Temperature - Case	T _{MS}	° C	-40	+125
RF Input power (CW)	P _{in}	dBm		+36
Die T _{Junction}	T _J	° C		+150
Positive Supply Voltage	V _{+SS}	V		+13

Appropriate Heat sink must be used

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 @ 23°C

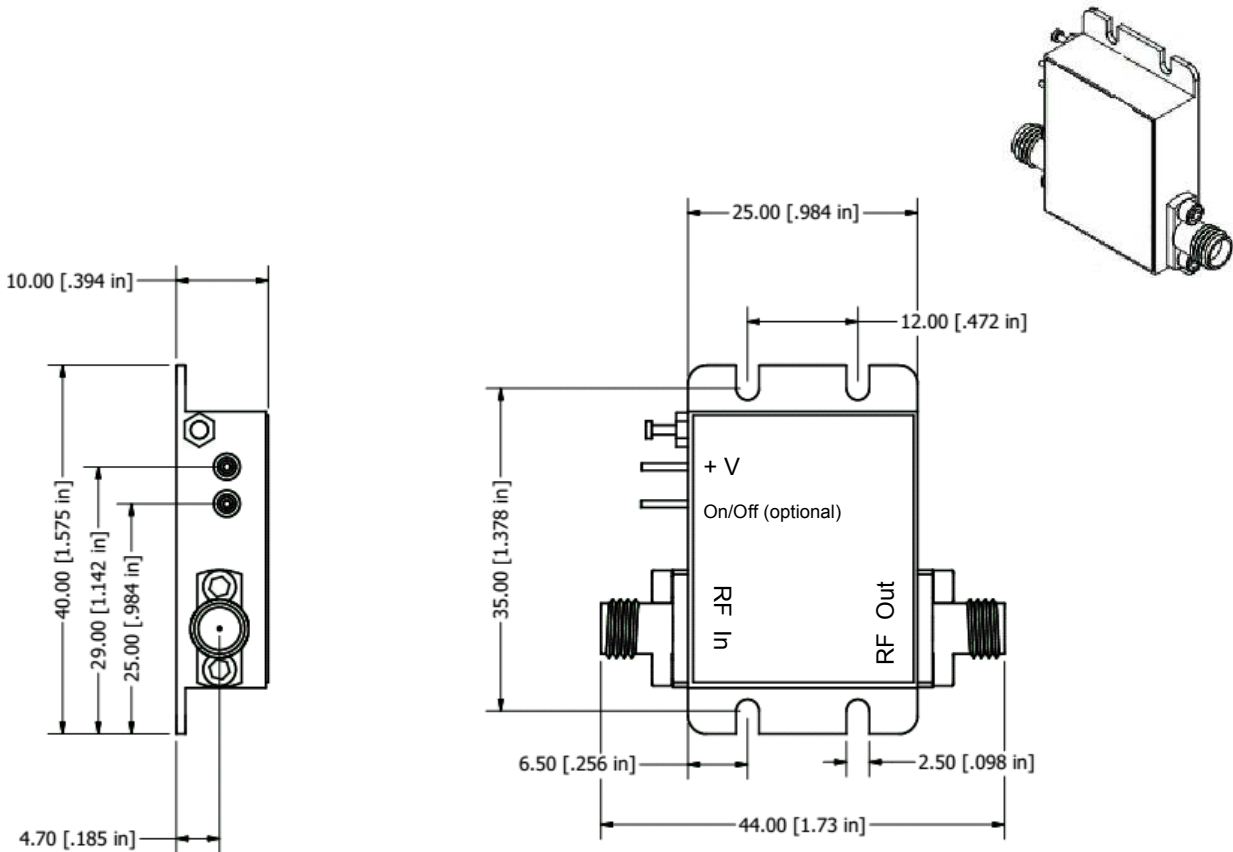
Parameter	Conditions	Units	MIN	Typical	MAX
Frequency Range		GHz	0.5		18
Gain	Small Signal	dB	29	31	
Gain Flatness		dB		±1.5	±2.5
Noise Figure		dB		3	4.5
Output Power (P1dB)		dBm	25	27	
OIP3	OIP3 @ 10 GHz Two tone F1-F2= 10MHz	dB		37	
RF Input power survival CW	For short period of time	dBm	36		
RF Input Impedance	Reference to 50 ohms VSWR			1.8:1	2.3:1
RF Output Impedance	Reference to 50 ohms VSWR			1.8:1	2.3:1
Supply Voltage Positive:		V		+12	
Supply Current Positive:	Small signal	mA		480	550

Notes:

1/ Unconditionally stable

Customized configurations of the above specifications are available

Package Outline M020: SMA Connectorized mm(inches)



Field replaceable SMA Connectors

Note: The unit must be attached to proper heat sink

Housing: Aluminum Gold over Nickel plated
Removable SMA and Ground Slug

Model Number	Description	Hermeticity	Package
AMT-A0215	SMA Female	Non-Hermetic	Outline: M020
AMT-A0215-H	SMA Female	Hermetic	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:

**701 Cascade Pointe Lane
Cary, NC 27513**

**ISO 9001:2015
Certified Company**



Phone: (984) 228-8001

info@agilemwt.com

www.agilemwt.com

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