

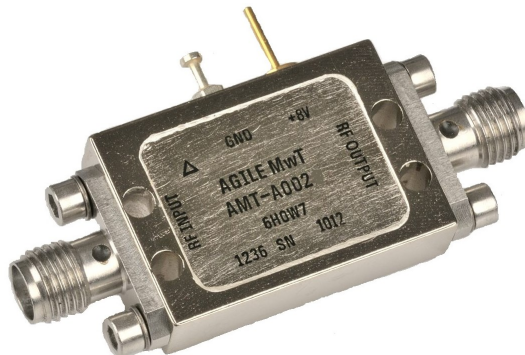
# AMT-A0483 700 MHz to 1100 MHz Low Noise Medium power Amplifier

## Data Sheet



## Features

- 700 MHz to 1100 MHz Frequency Range
- Typical Noise Figure < 0.5 dB 0.7dB max
- Gain 20 dB typical
- Gain Flatness <  $\pm 1.8$  dB
- P1dB > +20 dBm typical
- Internally matched
- Internal DC Regulator
- Operates from a Single +8V Supply
- Unconditionally Stable
- State-of-the-Art GaAs Technology



## Description

The AMT-A0483 is a Low Noise with Medium Power amplifier with very low noise figure over the full frequency range. The performance is achieved through the use of AMT's proprietary technology. The amplifier I/Os are Internally matched to 50 Ohms and are DC blocked. The AMT-A0483 is ideal for use as Front End of receiver system, or where amplification is required without adding excessive noise in a Hi-Rel communications system for Commercial or Military applications

## Applications

- Receiver front end,
- Communication systems
- Microwave Radio systems
- Test Equipment

## MAXIMUM RATINGS<sup>1</sup>

Parameter	Symbol	Units	MIN	MAX
Operating Temperature – Case	$T_{MO}$	$^{\circ}C$	-40	+85
Storage Temperature - Case	$T_{MS}$	$^{\circ}C$	-40	+125
RF Input power (CW)	$P_{in}$	dBm		+8
Die $T_{Junction}$	$T_J$	$^{\circ}C$		+150
Positive Supply Voltage	$V_{+SS}$	V		+9

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		MHz	700		1100
Gain	Small Signal	dB	18	20	
Gain Flatness		dB		±1.5	±1.8
Output Power (P1dB)	1 dB compression point @950 MHz	dBm	+19	+20	
OIP3	OIP3 measured @ 950 MHz Two tone F1-F2= 10MHz	dB		+29	
Noise Figure		dB		0.5	0.7
RF Input Impedance	Reference to 50 ohms VSWR			1.8:1	2.0:1
RF Output Impedance	Reference to 50 ohms			1:8:1	2.0:1
Supply Voltage Positive:		V		+8V	
Supply Current Positive:		mA		90	120

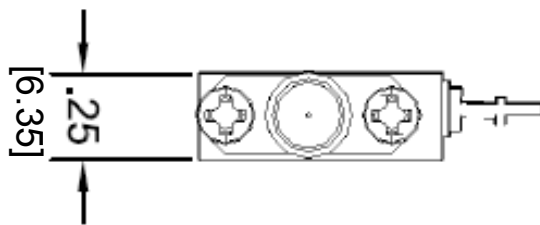
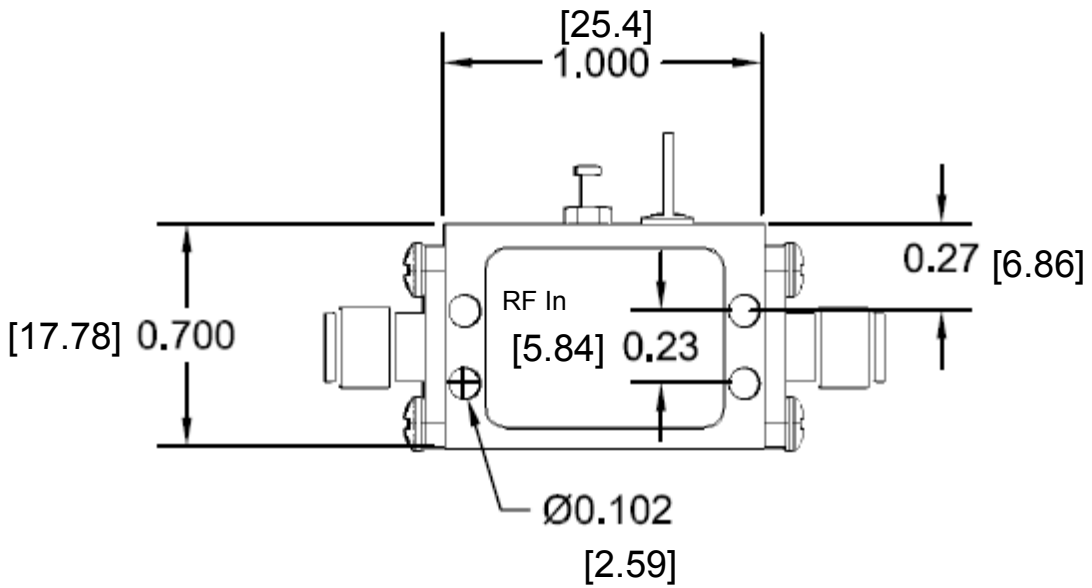
Notes:

1/ Unconditional Stability:

Note: Noise figure uncertainty per HP/Agilent equipment

Customized configurations of the above specifications are available

**Package Outline: SMA Connectorized inches [mm]**



<b>Model Number</b>	<b>Description</b>	<b>Hermeticity</b>	<b>Package</b>
AMT-A0483	SMA Female	Non-Hermetic	Outline: M007

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.

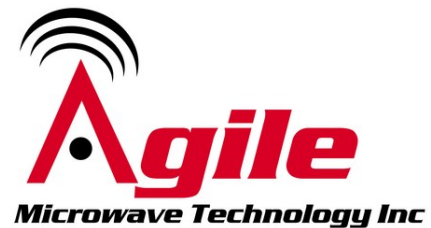
- Add additional functionality: Input limiter, Temperature compensation, Amplitude/Phase matching, Amplitude/Phase Tracking, Automatic Gain control, Gain sloping, Bypass path, Specific supply voltage, Regulation, Power detector, Health status, and others
- Integrated: Filters, Switches, Limiter, Digital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

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