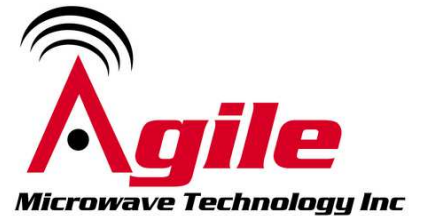


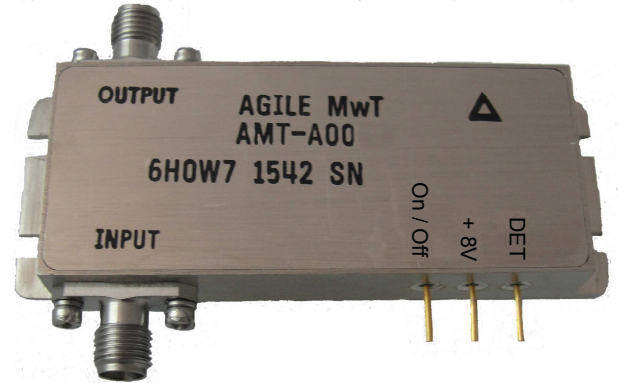
AMT-A0360-IS 18 GHz to 20 GHz +33 dBm P1dB Broadband High Power Amplifier w Isolator

Data Sheet



Features

- 18 GHz to 20 GHz Frequency Range
- Typical P1dB power > +33 dBm (2W)
- Gain 40 dB typ, 37 dB minimum
- **Integrated Isolator at the output**
- OIP3 +41 dBm typical
- Internally Regulated
- Operates from a Single +8V Supply
- Unconditionally Stable
- Compact Size



Description

The AMT-A0360 is a Broadband 2 W P1dB 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 are DC blocked. The AMT-A0360 is ideal for use Point to Point communications, as extending power range of test equipment, EW systems or where broadband amplification and power are required in a Hi-Rel communications system for Commercial or Military applications

Applications

- Point to Point Communications system
- Test Equipment
- EW Systems
- Lab Applications
- Radar

MAXIMUM RATINGS¹

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		+10
Die T _{Junction}	T _J	° C		+150
DC Current		A		2.5
Positive Supply Voltage	V _{+SS}	V	+7	+10

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

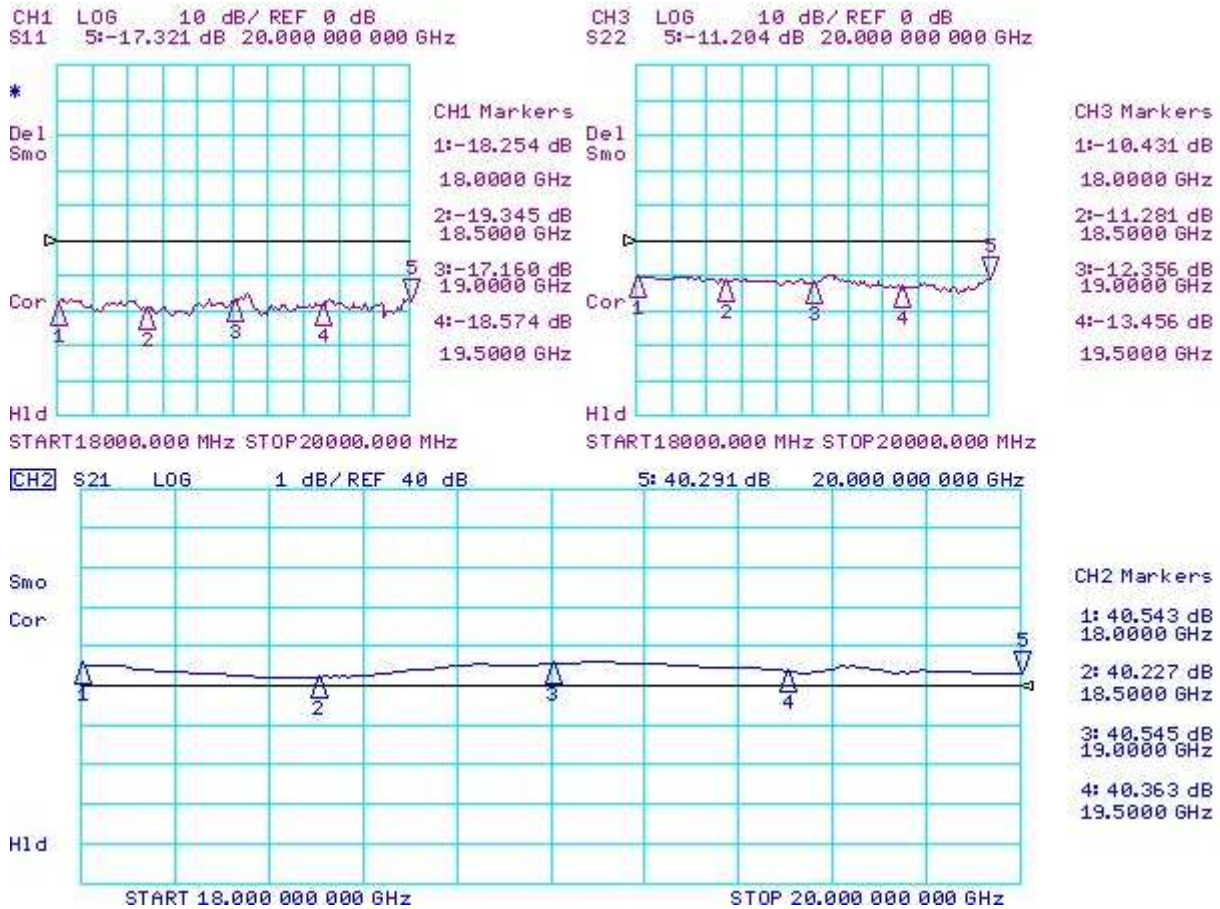
Parameter	Conditions	Units	MIN	Typical	MAX
Frequency Range		GHz	18		20
Gain	Small Signal	dB	37	40	
Gain Flatness		dB		±0.7	±2
Output Power (P1dB)	1 db compression	dBm	31	33	
Output Power (Psat)	Saturated Output power	dBm	32	34	
OIP3	OIP3 measured @ 19 GHz Two tone F1-F2= 10MHz	dB		41	
Noise Figure		dB		8.5	10
Reverse Power at RFout	Reverse power at output	W			3
Detect	RFout = 0 dBm to +33 dBm	V	0.01		3
On / Off	Open = On, TTL low = Off	V	0	open	5
RF Input Impedance	Reference to 50 ohms VSWR	dB		1.5:1	2.0:1
RF Output Impedance	Reference to 50 ohms VSWR	dB		1.5:1	2.0:1
Supply Voltage Positive:		V	+7V	+8	
Supply Current Positive:	Small signal	A		1.2	1.6

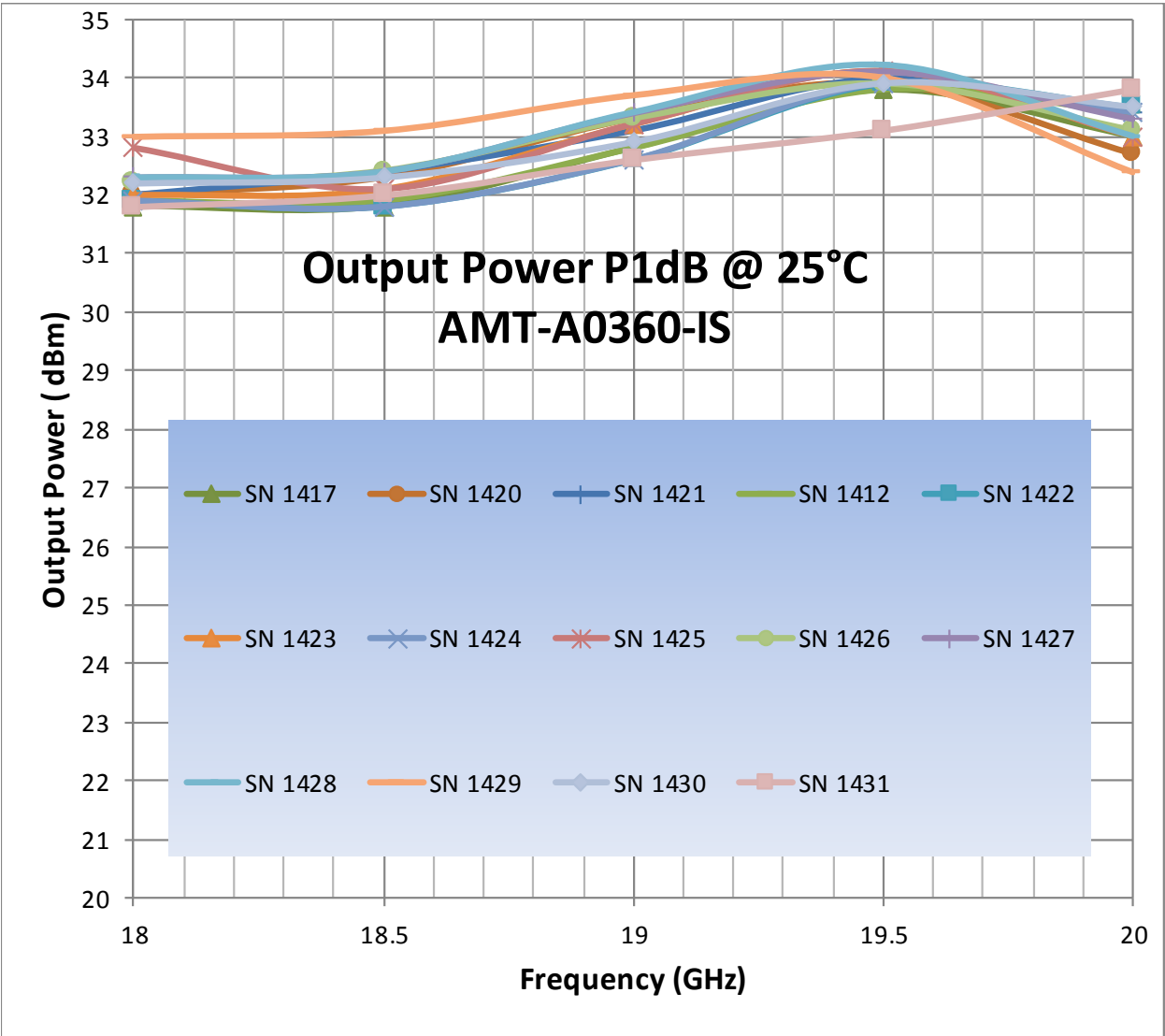
Notes:
1/ Un-

conditional Stability

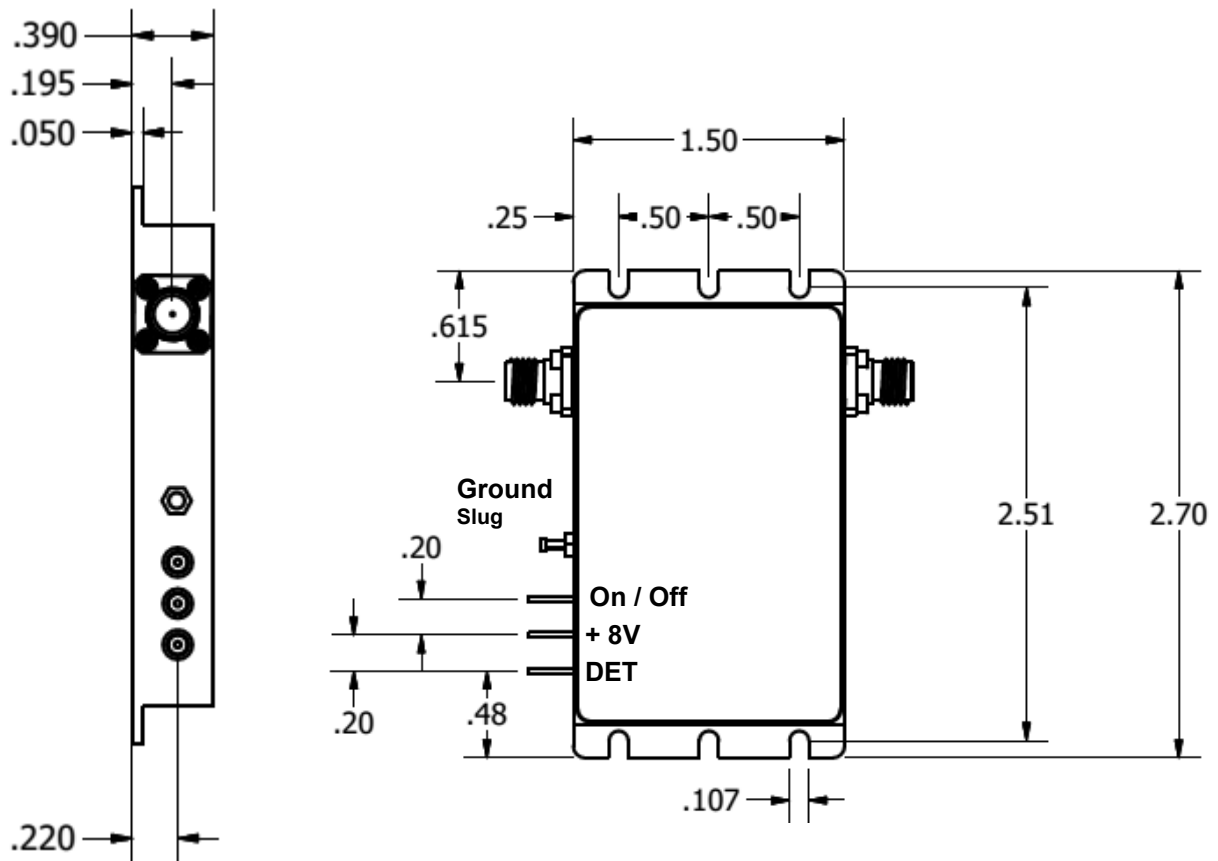
Customized configurations of the above specifications are available

Typical S-Parameters @ 25C





Package Outline: Units are in Inches [mm] SMA Connectorized Inch-



**Field replaceable SMA Connectors
Housing Material Aluminum, Nickel Plated**

**Note: The unit must be attached to proper heat sink with thermal interface material (Thermal Pad or Thermal Grease)
Heat Sink must be able to dissipate minimum of 14W**

Model Number	Description	Hermeticity	Package
AMT-A0360-IS	SMA Female	Non-Hermetic	Outline: M164

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.

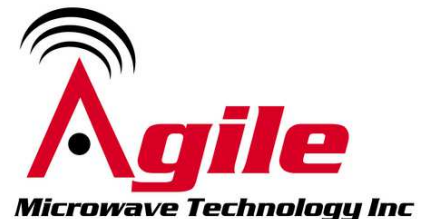
- Add additional functionality: Input limiter, Temperature compensation, Amplitude/Phase matching, Amplitude/Phase Tracking, Automatic Gain control, Gain sloping, Bypass path, Specific supply voltage, Regulation, Power detector, Health status, and others
- Integrated: Filters, Switches, Limiter, Digital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

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Cary, NC 27513**

**ISO 9001:2015
CERTIFIED**



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