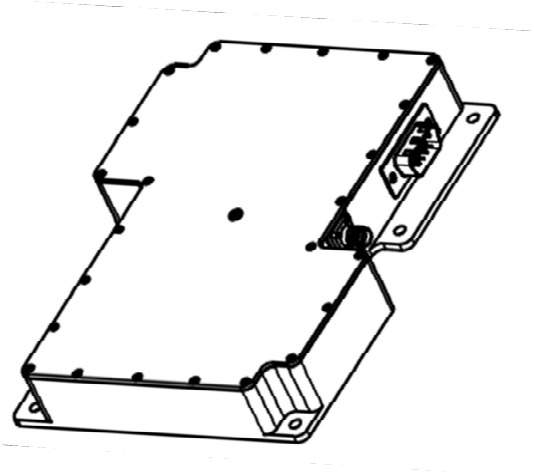
AMT-A0350 2 GHz to 18 GHz 15W Amplifier
Broadband 15W Psat Power Amplifier

Data Sheet

Features

- 2000 to 18000 MHz Frequency Range
- 15W Psat typical 10W minimum
- Gain 43dB Typical
- Gain Flatness ± 1.3 dB Typical
- Internally Regulated
- Single +28V Supply
- Compact Design
- Unconditionally Stable



Description

The AMT-A0350 is a Broadband High power amplifier in a compact size. The performance is achieved through the use of AMTI's proprietary matching technology . The amplifier I/Os are Internally matched to 50 Ohms and DC Blocked. The AMT-A0350 is ideal for use in testing, EW, Lab applications, Communication systems or where broadband amplification and power are required in a Hi-Rel communications system for Commercial or Military applications

Applications

- Test Equipment
- Lab Applications
- EW Systems

MAXIMUM RATINGS[1] **Must be mounted to Proper heatsink**

Parameter	Symbol	Units	MIN	MAX
Operating Temperature – Case	T_{MO}	° C	-20	+75
Storage Temperature - Case	T_{MS}	° C	-20	+125
RF Input power (CW)	Pin	dBm		+15
Die $T_{Junction}$	T_J	° C		+150
Positive Supply Voltage	V_{+SS}	V		+30

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.

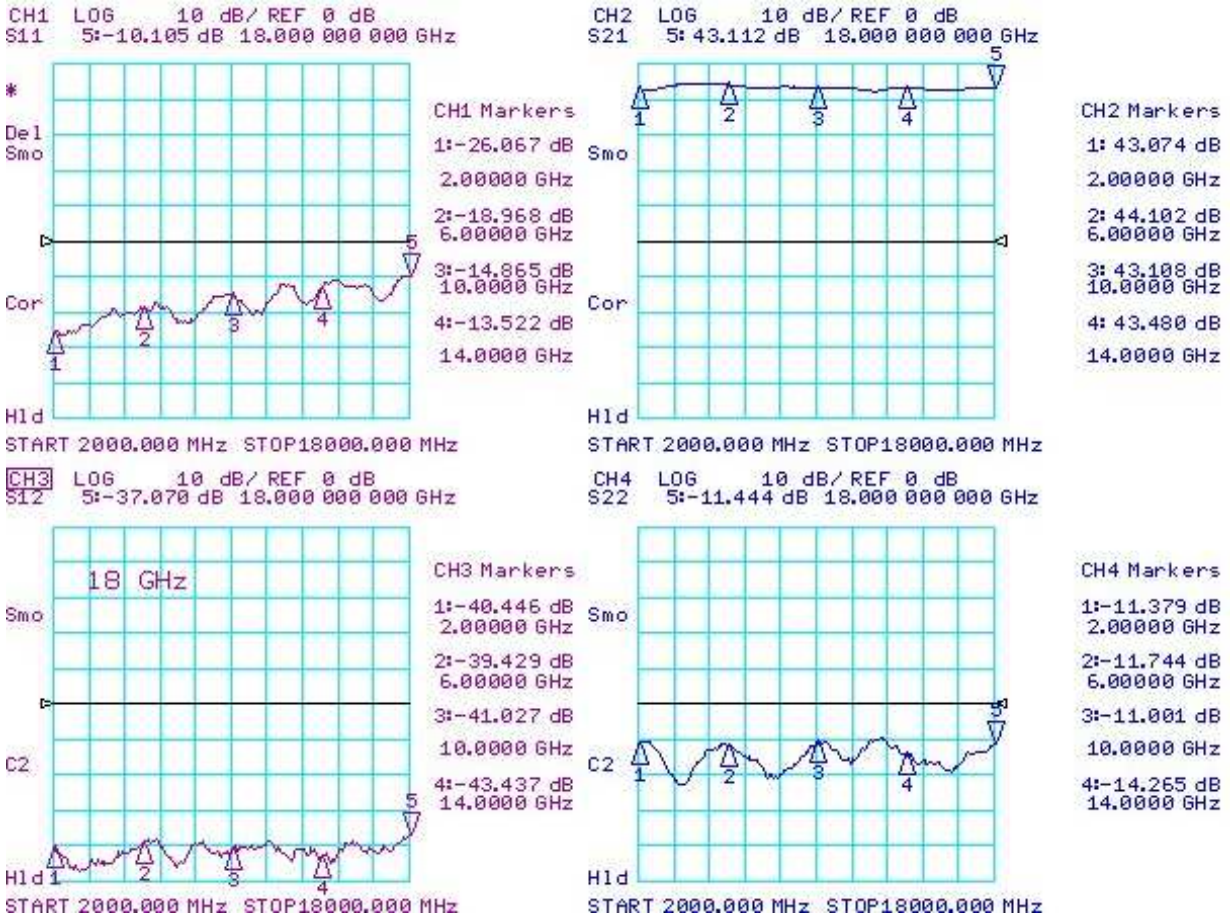
ELECTRICAL SPECIFICATIONS @ 25ºC

Parameter	Conditions	Units	MIN	Typical	MAX
Frequency Range		MHz	2000		18000
Gain[2]	Small Signal	dB	40	43	
Gain Flatness		dB		±1.3	±2.5
Noise Figure		dB		8	
Output Power (Psat)		dBm	38	42	
OIP3	OPI3 @ 10 GHz Two tone F1-F2= 10MHz	dB		45	
RF Input Impedance[2]	Reference to 50 ohms VSWR			1.8:1	2.3:1
RF Output Impedance[2]	Reference to 50 ohms VSWR			1.8:1	2..3:1
Supply Voltage Positive: :	 Psat	V A		28 2.7	

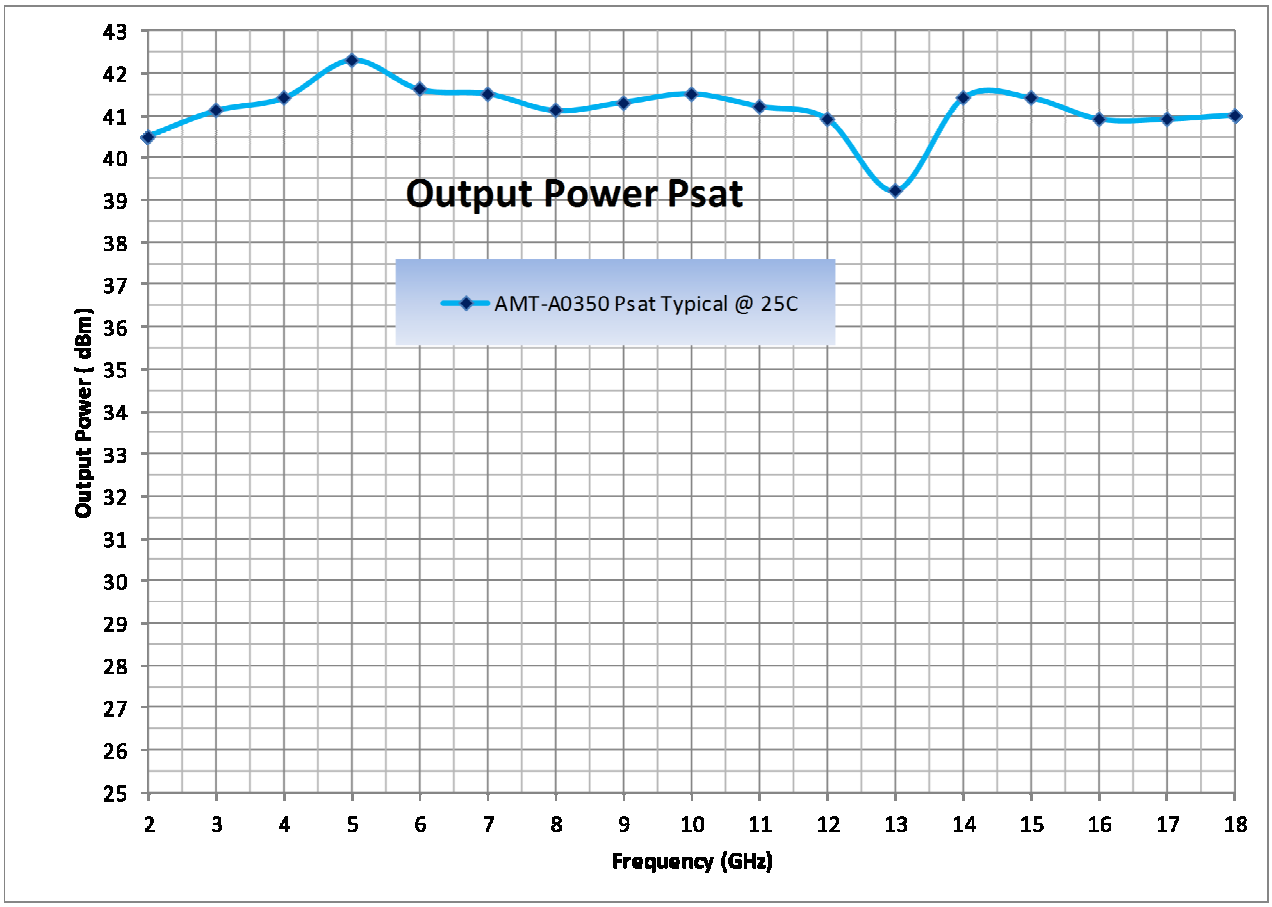
Notes:
1/ Unconditional Stability
2/ Small Signal

Customized configurations of the above specifications are available

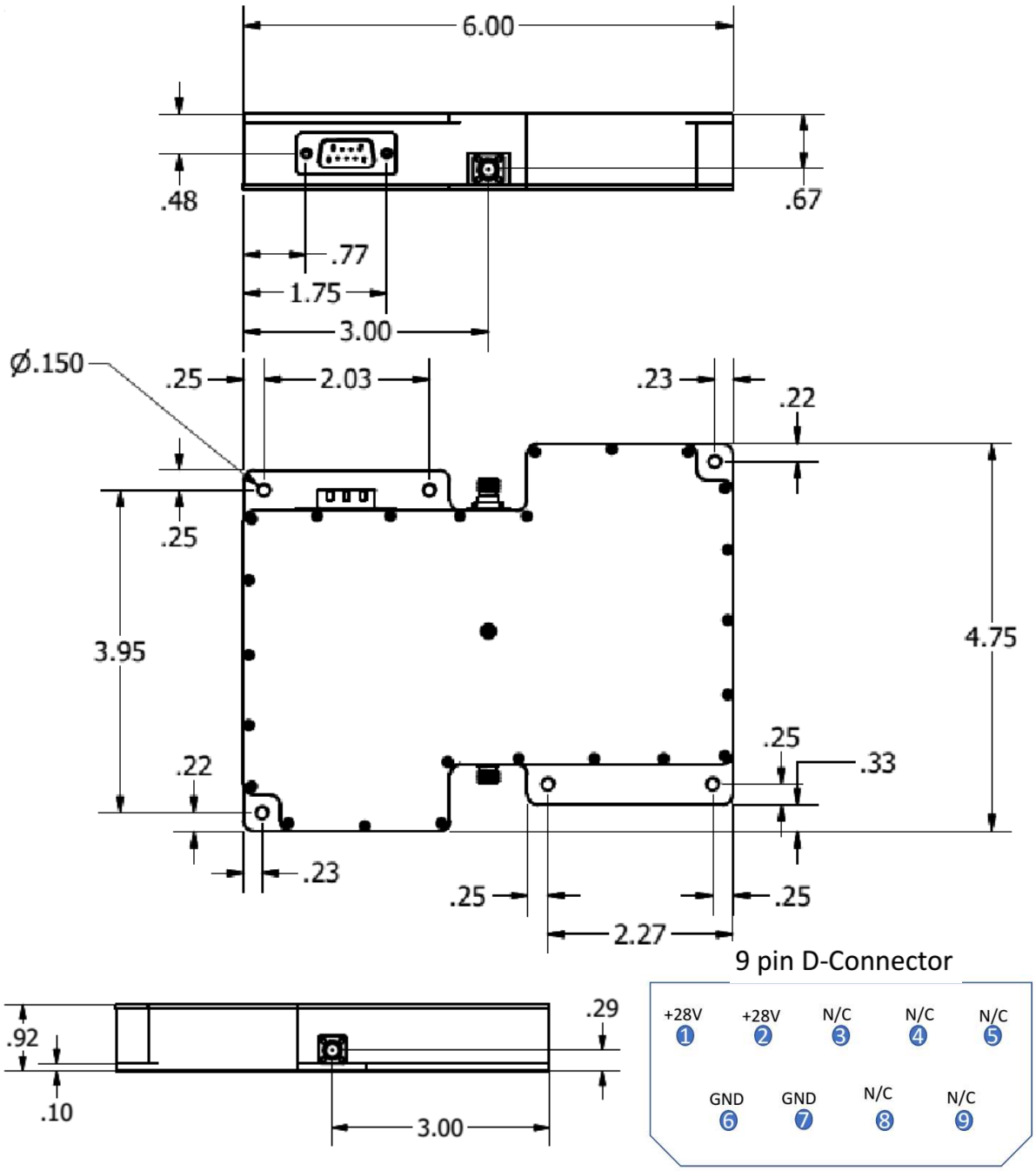
Typical S-Parameters @ 23ºC



Typical Output Power Psat @ 25C



Package Outline : SMA Connectorized (inches)



Model Number	Description	Hermeticity	Package
AMT-A0350	SSPA	Non-Hermetic	Outline: M166

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 Certified Company

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