

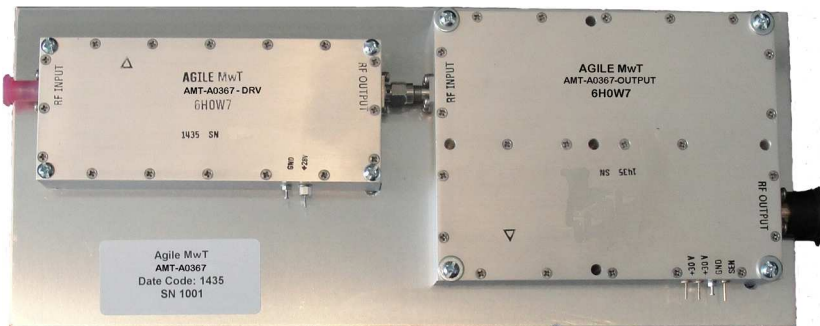
AMT-A0367 500 MHz to 3000 MHz Solid State Power Amplifier(SSPA) 50W P1dB, 125W Psat



Data Sheet

Features

- 500 MHz to 3000 MHz Frequency Range
- 50 Watts P1dB, 125 Watts Psat
- OIP3 +58 dBm typical
- 55 dB typical Gain
- Gain Flatness ± 2 dB Typical
- VSWR IN/OUT 1.4:1 typical
- 2nd Harmonic -30 dBc typical
- Compact 2 module design for OEM systems
- Unconditionally Stable



Description

The AMT-A0367 is a Broadband High power amplifier in a 2 compact size modules. The performance is achieved through the use of AMTI's proprietary matching technology and latest in SSPA technology. The amplifier I/Os are Internally matched to 50 Ohms and DC Blocked. The 2 modules allows better heat spread and assembly at system level. The AMT-A0367 is ideal for use EMI Compliance testing, Lab applications, Communication systems or where broadband amplification and power are required in a Hi-Rel communications system for Commercial or Military applications

Applications

- EMI Compliance Testing
- Lab Applications

MAXIMUM RATINGS¹

EAR99 NLR

Parameter	Symbol	Units	MIN	MAX
Operating Temperature – Case	T _{MO}	° C	0	+50
Storage Temperature - Case	T _{MS}	° C	-20	+85
RF Input power (CW)	P _{in}	dBm		+10
Die T _{Junction}	T _J	° C		+150
Positive Supply Voltage	V _{dd}	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 @ 23°C

Parameter	Conditions	Units	MIN	Typical	MAX
Frequency Range		MHz	500		3000
Gain ²	Small Signal	dB	48	55	
Gain Flatness		dB		±2	±4
Output Power Psat ²	Saturated Output power	dBm Watts	+48 63	+51 125	
Output Power (P1dB) ²		dBm Watts	+47 50	+49 79	
OIP3	OIP3 measured Two tone +40 dBm output power	dB		57	
Noise Figure		dB		6	
RF Input Impedance ²	Reference to 50 ohms VSWR			1.4:1	2.0:1
RF Output Impedance ²	Reference to 50 ohms VSWR			1.4:1	2.0:1
Supply Voltage Positive: :	Driver module Current @ 50W p1dB Output Module Current @ 50W p1dB	V A V A		28 2 30 5	

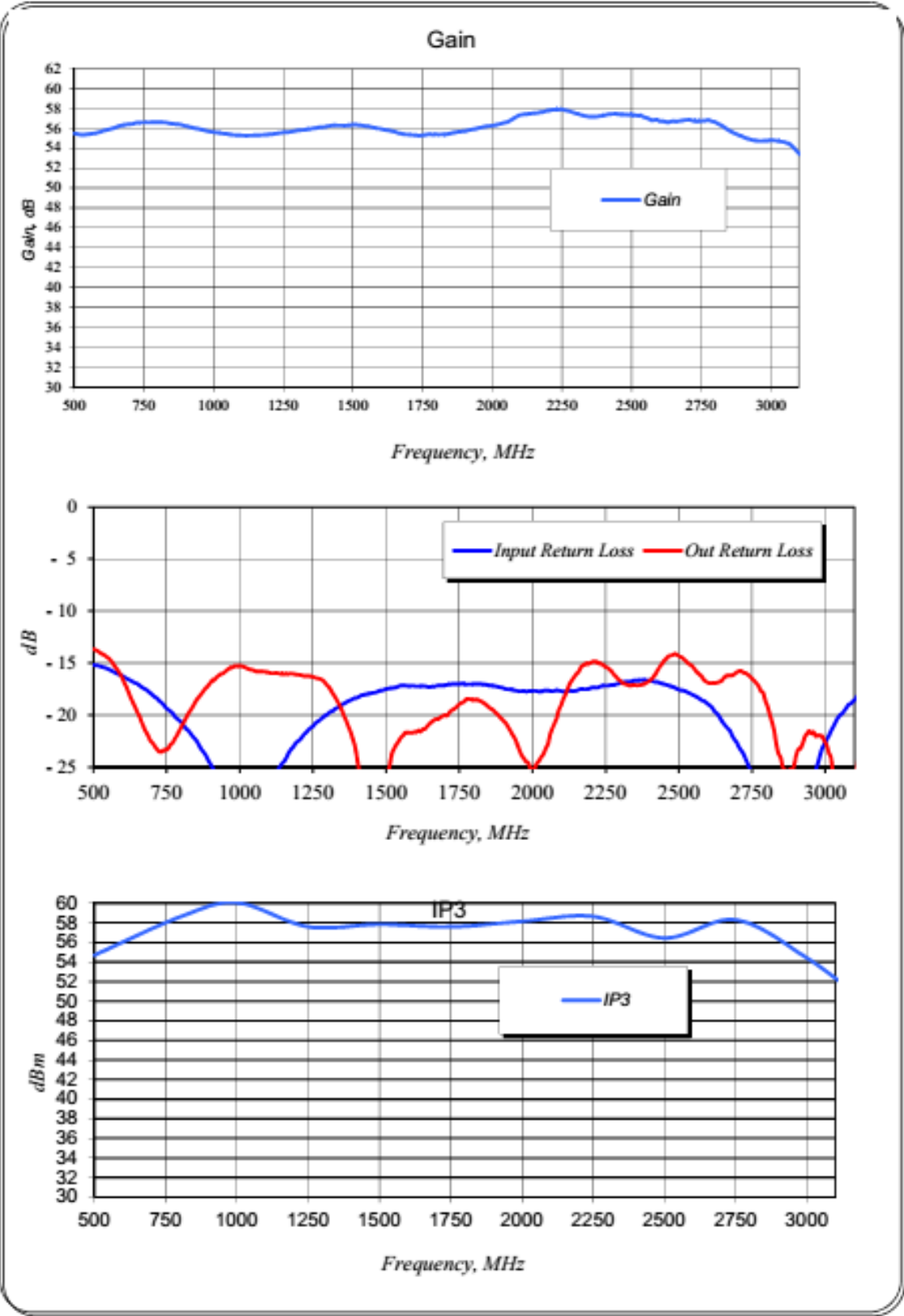
Notes:

1/ Unconditional Stability

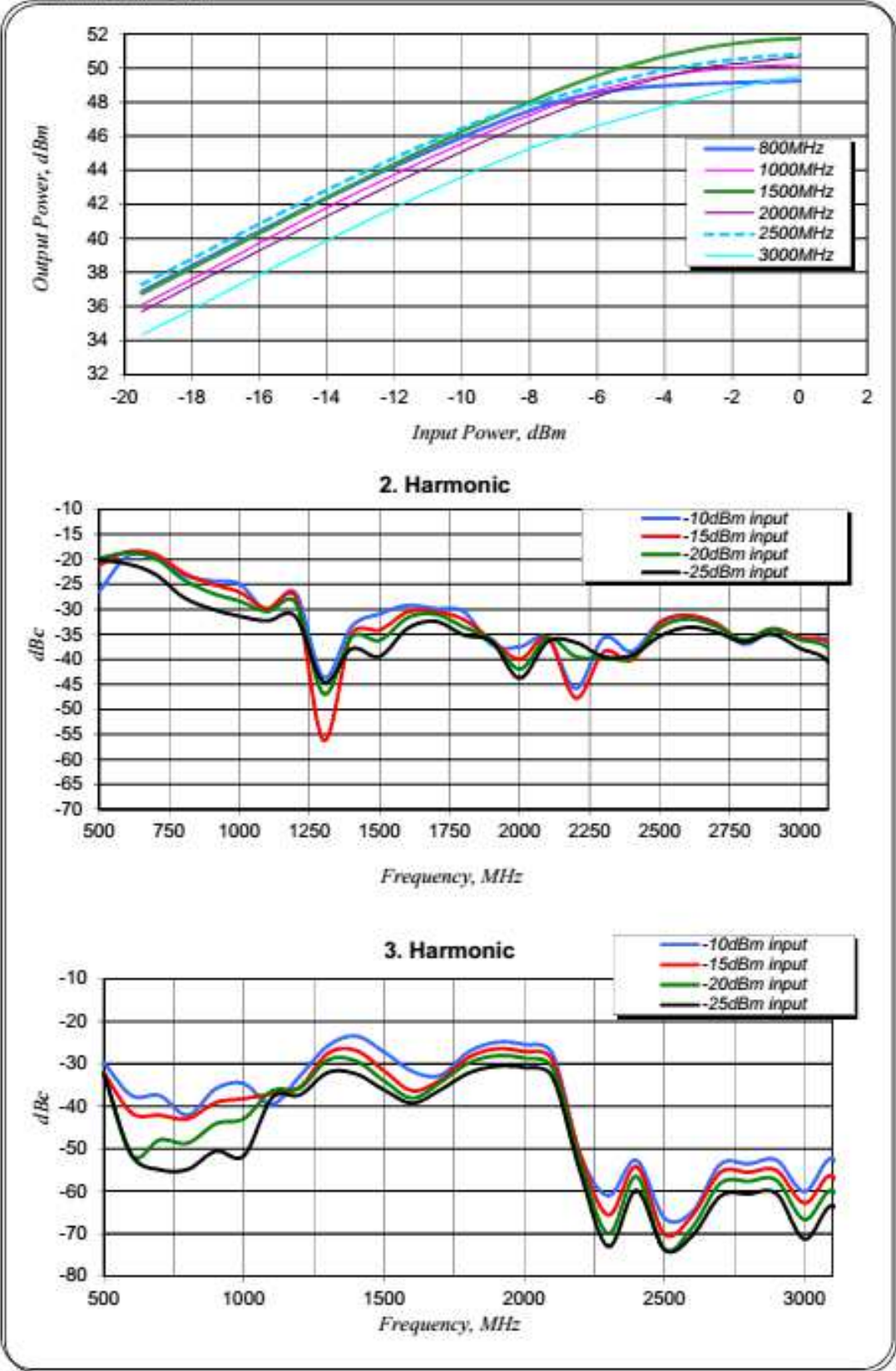
2/ Above 700 MHz

Customized configurations of the above specifications are available

Typical S-Parameters @ 23°C



Typical Parameters @ 23°C



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.

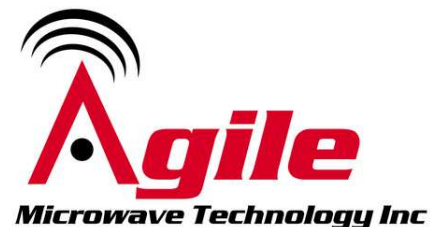
- Add additional functionality: Input limiter, Temperature compensation, Amplitude/Phase matching, Amplitude/Phase Tracking, Automatic Gain control, Gain sloping, Bypass path, Specific supply voltage, Regulation, Power detector, Health status, and others
- Integrated: Filters, Switches, Limiter, Digital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



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