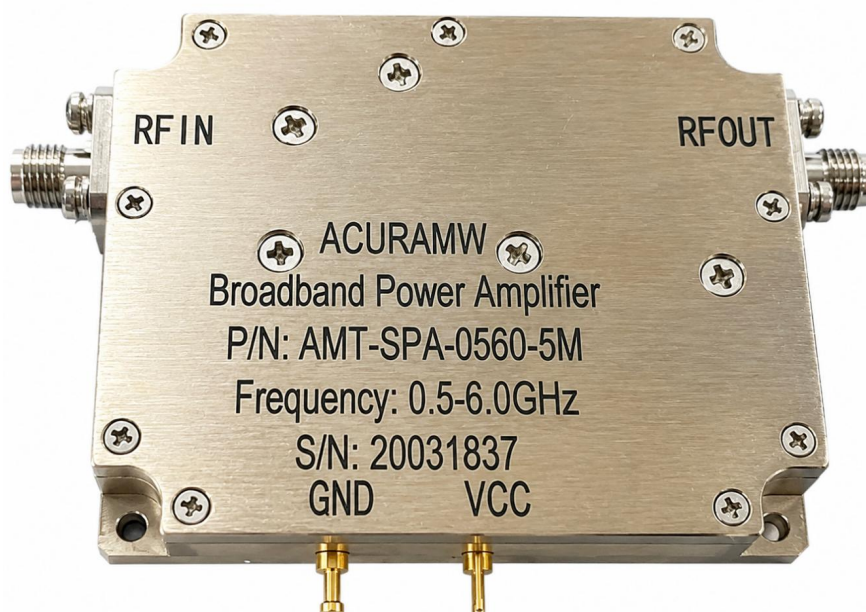


0.5-6.0GHz-5W

Power Amplifier Test Report



June, 2026



1. Description

Product Name: Solid-State High-Power Amplifier Module;

Model No.: AMT-SPA-0560-5M;

Series No.: 20031837

Quantity: 1 unit

2. Inspection Basis

0.5-6.0GHz 5W spec.

3. Test Instruments List

No.	Equipment Name	Instrument Model	QTY	Remarks
1	VNA	E5063A	1 Set	
2	Spectrum Analyzer	N9020A	1 Set	
3	Signal Generator	N5182A	1 Set	

4. Specifications Test Table

No.	Technique Spec.s	Technique Spec.s	Test Result	Remarks
1	Frequency range	0.5-6 GHz	0.5-6	
2	Power gain	≥ 37 dB	37.9	
3	Gain Flatness	$\leq \pm 2$	± 1.4	
4	Output power Saturation	≥ 37 dBm	37.9	
5	Input VSWR	$\leq 2:1$	1.52	
6	Max. Input power level (no damage)	≤ 10 dBm	10	
7	Spurious signals	≤ -60 dBc	-75	



8	Operating voltage	+28V	+28V	
9	Operating current	Typ 1.2 A	1.19	
10	Input and output RF Impedance	50 Ω	50	
11	Load Mismatch (VSWR, No Degradation)	$\leq 5:1$	Compliant	

5. Mechanical specification

No.	parameter	Specification	Inspection Result	Remark
1	Dimension (WxDxH)	60×50×15 mm	60.02x49.92x15.08mm	
2	Weight	0.2 Kg maximum	0.088Kg	
3	RF connector input	Type-SMA, Female	SMA -F	
4	RF connector output	Type-SMA, Female	SMA -F	
5	Power Supply	Feed-through	Feed-through	
6	Cooling	External heatsink (not supply)	External heatsink (not supply)	

6. Environmental characteristics

No.	parameter	Specification	Inspection Result	Remark
1	Operating temperature	-30~+75°C	Compliant	
2	Non- operating temperature	-40~+85°C	Compliant	

7. Conclusion

Based on the comprehensive testing conducted on the solid-state high-power amplifier module, the product's performance specification fully comply with the technical specifications outlined in the "Technical Agreement for Solid-State High-Power Amplifier Modules."



8. +25°C Test Data

No.	parameter	Unit	Test Data											
1	Frequency	GHz	0.5	0.6	0.7	0.8	0.9	1	1.1	1.2	1.3	1.4	1.5	1.6
2	Output power Saturation @Input powerlevel 0dBm	dBm	39.4	39.6	39.7	39.8	39.9	40.2	40.6	40.5	40.5	40.5	40.2	40.4
3	Operating current	A	0.82	0.85	0.87	0.9	0.92	0.95	0.97	0.98	0.98	0.98	0.98	0.99
4	Frequency	GHz	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8
5	Output power Saturation @Input powerlevel 0dBm	dBm	40.3	40.4	40.4	40.2	40.6	40.4	40.1	39.8	39.3	39.4	39.2	39.3
6	Operating current	A	1	1.04	1.06	1.08	1.1	1.12	1.13	1.06	1.06	1.12	1.12	1.12
7	Frequency	GHz	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
8	Output power Saturation @Input powerlevel 0dBm	dBm	39.3	39.2	39.4	39.3	39.2	39.6	39.6	40	40.2	40.1	39.1	39.6
9	Operating current	A	1.14	1.17	1.19	1.17	1.16	1.15	1.13	1.13	1.16	1.15	1.03	1.11
10	Frequency	GHz	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2
11	Output power Saturation @Input powerlevel 0dBm	dBm	39.8	39.7	39.7	39.7	40	40.2	39.6	38.7	38.2	37.9	39.2	39.6
12	Operating current	A	1.12	1.13	1.06	1.07	1.09	1.11	1.06	1.07	1.13	1.04	1.13	1.09
13	Frequency	GHz	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0				
14	Output power Saturation @Input powerlevel 0dBm	dBm	40.2	40.5	39.8	39.6	39.3	39.5	39.5	38.9				



15	Operating current	A	1.08	1.11	1.07	1.07	1.07	1.09	1.07	1.02	
16	Power Gain @Input powerlevel 0dBm	dB	≥37.9								
17	Gain Flatness	dB	±1.4								
18	Spurious signals	dBc	≤-75								
19	Input VSWR	2:1	≤1.52								



9. Input VSWR

