



RF Cascadeable Amplifiers

Space Qualified

AM-Series

Electrical Specifications

Part #	AM-1057	AM-1064	AM-1067	AM-1081	AM-S5029	AM-S5037
Frequency Range	10–1000 MHz	10–1024 MHz	10–1000 MHz	2–22 MHz	335–970 MHz	335–970 MHz
Gain	15.7 ±0.7 dB	12.2 ±1 dB	15 dB Min	13.0 ±0.5 dB	12.0±0.8 dB	15.4±1.4 dB
Frequency Response	±1.0 dB Max	±1.0 dB Max	±1.0 dB Max	±0.4 dB Max	±0.25 dB	±0.35 dB
Gain Variation w/Temp	±1.0 dB Max	±1.0 dB Max	±1.25 dB Max	±0.8 dB Max	+0.4 dB -1.0 dB	±0.7 dB
Output Power (1 dB comp)	-3 dBm Min	+12 dBm Min	+7 dBm Min	+12 dBm Min	-2 dBm Min +4 dBm Max	-3 dBm Min
Noise Figure	3.7 dB Max	5.0 dB Max	4.2 dB Max	5.0 dB Max	4.5 dB Max	3.3 dB Max
Reverse Transmission	-17 dB Max -20 dB Typ	-14 dB Min -17 dB Typ	-17 dB Max -20 dB Typ	— —	— —	— —
VSWR	2.0:1 Max	1.8:1 Max	2.5:1 Max	1.8:1 Max	1.7:1 Max	1.7:1 Max
Intermodulation Second Order Third Order	+11.5 dB Min +8.5 dB Min	+37 dB Min +25 dB Min	+26 dBm Min +19 dBm Min	— —	— —	— —
Bias Power	+15 Vdc 12.5 mA Max	+15 Vdc 43 mA Max	+15 Vdc 29 mA Max	+15 Vdc 43 mA Max	+5 Vdc 12 mA Max	+15 Vdc 12.5 mA Max
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Max RF Input	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+5 dBm	+7 dBm
Package	TO-8	TO-8	TO-8	TO-8	TO-8	TO-8

Specifications Subject to Change Without Notice.

M/A-COM Inc. ■ 1011 Pawtucket Boulevard, Lowell, MA 01853 USA

■ Telephone: 800-366-2266

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Test Step	Mil Spec	Method	Condition
100% Screening			
Initial Electrical	Per Detail Spec		
Stabilization Bake	Mil-Std-883C	1008	B
Temperature Cycling	Mil-Std-883C	1010	B
Constant Acceleration	Mil-Std-883C	2001	B
PIND	Mil-Std-883C	2020	A or B
Interim Electrical	Per Detail Spec		
High Temp Burn-In (240 Hours)	Mil-Std-883C	1015	B, D, or E
Final Electrical	Per Detail Spec		
Radiographic	Mil-Std-883C	2012	
Seal test			
Fine Leak	Mil-Std-883C	1014	A
Gross Leak	Mil-Std-883C	1014	C
External Visual	Mil-Std-883C	2009	

Quality Conformance Tests*			
Group IIC			
Thermal Shock	Mil-Std-202	204	D
Temperature Cycling	Mil-Std-883C	1010	B
Moisture Resistance	Mil-Std-883C	1004	
Seal Test			
Fine Leak	Mil-Std-883C	1014	A
Gross Leak	Mil-Std-883C	1014	C
Acceleration	Mil-Std-883C	2001	B
Vibration	Mil-Std-883C	2007	A
Seal Test			
Fine Leak	Mil-Std-883C	1014	A
Gross Leak	Mil-Std-883C	1014	C
External Visual	Mil-Std-883C	2009	
Group IIIC			
Resistance to Solvents	Mil-Std-883C	2015	
Solderability	Mil-Std-883C	2003	
Leads Integrity	Mil-Std-883C	2004	B2
Seal Test			
Fine Leak	Mil-Std-883C	1014	A
Gross Leak	Mil-Std-883C	1014	C
External Visual	Mil-Std-883C	2009	
Group IV			
Operating Life (1000 Hours)	Mil-Std-883C	1015	B, D, or E

* Qualification testing was successfully performed on the AM-1067.

The AM-1057, AM-1064, AM-1081, AM-S5029 and AM-S5037 were qualified by similarity to the AM-1067.

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