



Double Balanced Mixers

Space Qualified

MD-135X Series

Electrical Specifications

Part #	MD-1355	MD-1356	MD-1357
Frequency Range			
RF	1800–2200 MHz	5–1000 MHz	5–500 MHz
LO	1800–2200 MHz	5–1000 MHz	5–500 MHz
IF	100–150 MHz	DC–1000 MHz	DC–500 MHz
Conversion Loss	9.5 dB Max	7.5 dB Max	
Isolation			
LO to RF	25 dB Min	30 dB Min	25 dB Min
LO to IF	10 dB Min	25 dB Min	25 dB Min
RF to IF	12 dB Min	20 dB Min	20 dB Min
RF Input	300 mW Max	0 dBm	400 mW Max
Noise Figure	—	7.5 dB Max	7.5 dB Max
Two Tone IM Ratio	36 dB Min	45 dB Min	—
Package	0.385" x 0.510" Flatpak	0.385" x 0.510" Flatpak	0.385" x 0.510" Flatpak

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			
Internal Visual Inspection	Mil-Std-883C	2017	
External Visual Inspection	Mil-Std-883C	2009	
Initial Electrical	Per Detail Spec		
Thermal Shock	Mil-Std-883C	1010	B
Vibration	Mil-Std-883C	2007	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			
Soldering Heat	Mil-Std-202	210	C
Thermal Shock	Mil-Std-883C	1011	B
Mechanical Shock	Mil-Std-883C	2002	A
Vibration	Mil-Std-883C	2007	B
Electrical Measurements	Per Detail Spec		
Seal Test			
Fine Leak	Mil-Std-883C	1014	A
Gross Leak	Mil-Std-883C	1014	C
External Visual	Mil-Std-883C	2009	
Internal Visual	Mil-Std-883C	2017	
Operating Life (1000 Hours)	Mil-Std-883C	1015	B, D, or E
2000 Hours for QUAL			
1000 Hours for VOQ			

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