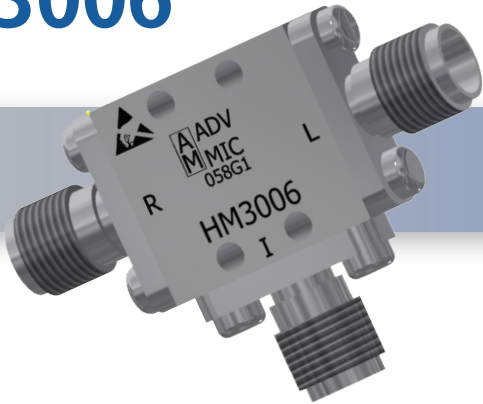


Part No:

HM3006



Advanced Microwave Triple Balanced Multi-Octave Microwave Mixer - SMA Female, 2 GHz to 24 GHz

Mixer Specifications

- Frequency Range RF/LO 2 - 24 GHz
- Frequency Range IF 0.6 - 8 GHz
- Conversion Loss 7 dB Typ., 12 dB max.
- L/R Isolation 21 dB Typ., 16 dB min.
- L/I Isolation 25 dB Typ., 16 dB min.
- LO Drive Level +10 to +16 dBm
- Input P1 dB +7 dBm min.
- Noise Figure Conv. Loss +0.5 dB
- Max Input Power +20 dBm
- Operating Temperature -40° to +85°C
- Storage Temperature -54° to +125°C
- ESD Sensitive Handle only in ESD Workstation

*NOTE:
Data shown here is actual plotted data. It is not computer generated.*

The Advanced Microwave HM3006 is a triple-balanced multi-octave 2 to 24 GHz microwave mixer with an IF frequency range of 0.6 to 8 GHz. The LO is driven between +10 to +16 dBm, and as an up or downconverter features typical conversion loss of 7 dB, L to I isolation of 25 dB, and L to R isolation of 21 dB. Maximum Input power is +20dBm.

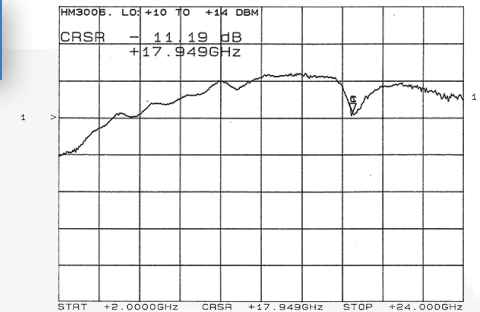
The HM3006 is RoHS compliant.



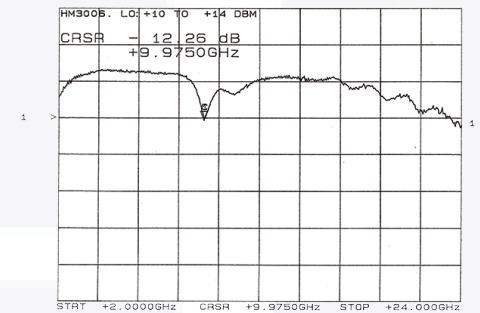
The Advanced Microwave Mixer offers an ultra wideband matching structure with a quad matched monolithic Schottky barrier diode, resulting in a broad band mixer with low conversion loss and low spurious response. The planar construction allows optimum phase and amplitude matching and tracking over a wide frequency range.

Advanced Microwave mixers can also be used for biphas and pulse modulation where the carrier signal is fed into LO and the modulated signal will appear at the RF port when a bipolar signal is fed into the IF port. The phase of the output signal will shift to 180 degrees when a reversal of polarity occurs. The current into the IF port is limited to 25 milliamps.

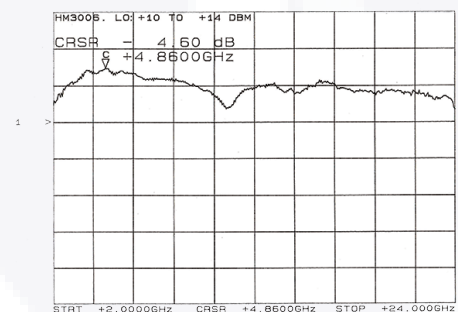
CH1: A -M - 11.19 dB
5.0 dB/ REF - 12.00 dB IF BW @ Fixed LO=18GHZ



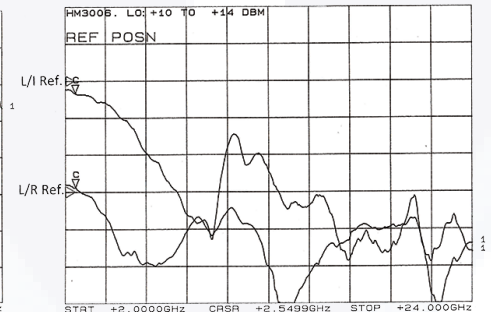
CH1: A -M - 12.26 dB
5.0 dB/ REF - 12.00 dB IF BW @ Fixed LO=10 GHZ



CH1: A -M - 4.58 dB
5.0 dB/ REF - 12.00 dB Conversion Loss @ FIXED IF=1 GHZ

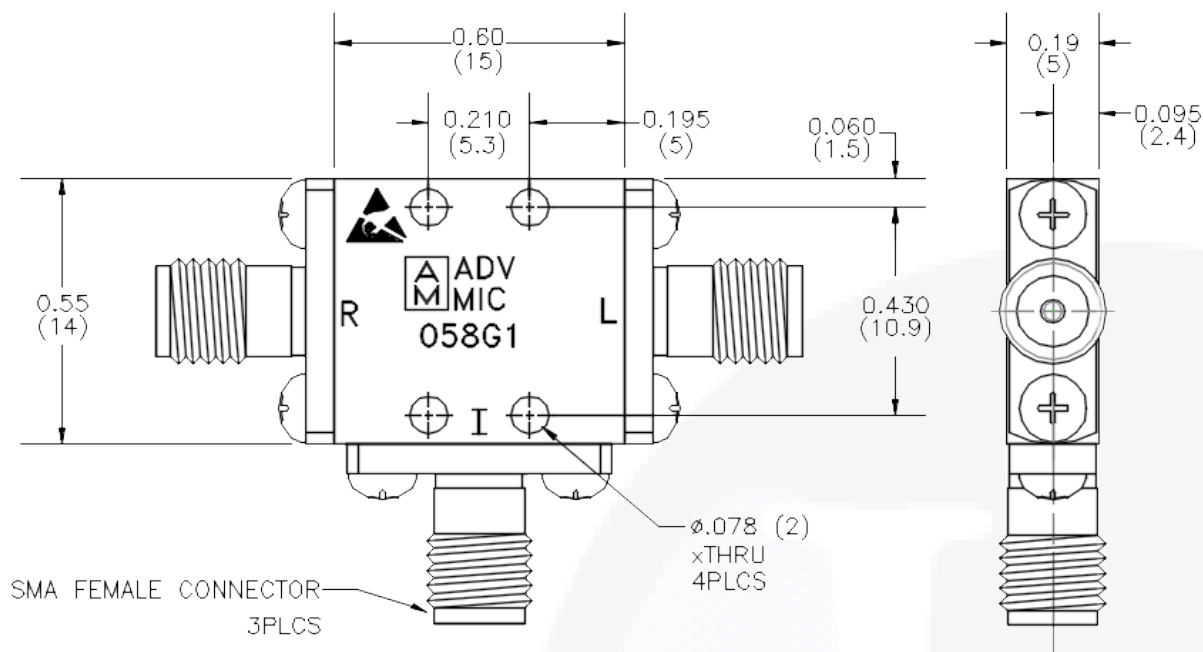


CH1: A -M - 20.88 dB
5.0 dB/ REF - 12.00 dB ISOLATION




To view online, go to: <https://www.hasco-inc.com/mixers/triple-balanced-multi-octave-microwave-mixer-sma-female-2-ghz-to-24-ghz-with-if-range-of-0-6-to-8-ghz-lo-power-10dbm-to-16dbm/>

HM3006 | 2 - 24 GHz | Outline Drawing



To view online, go to: <https://www.hasco-inc.com/mixers/triple-balanced-multi-octave-microwave-mixer-sma-female-2-ghz-to-24-ghz-with-if-range-of-0-6-to-8-ghz-lo-power-10dbm-to-16dbm/>

LTR	DESCRIPTION	DATE	APPR.	DRAWN BY: ABC	CHECKED BY: ABC
-	RELEASE	12/16	TAC	APPROVED BY: ABC	
					
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<p>THIS DRAWING IS A CONTROLLED DOCUMENT</p>				MATERIALS:	CAGE CODE:
				SEE DATA SHEET	OT8L4
				FINISHES:	SCALE:
				SEE DATA SHEET	N/A
				PART NO./DRAWING NO.	SIZE:
				HM3006	A
					REV:
					-