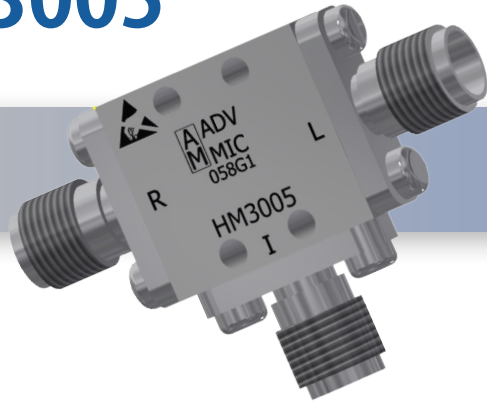


Part No:

# HM3005



## Advanced Microwave Multi-Octave Microwave Mixer SMA Female, 5.5 GHz to 24 GHz

### Mixer Specifications

- Frequency Range RF/LO 5.5 - 24 GHz
- Frequency Range IF DC - 4 GHz
- Conversion Loss 6.5 dB Typ., 11 dB max.
- L/R Isolation 28 dB Typ., 22 dB min.
- L/I Isolation 25 dB Typ., 18 dB min.
- LO Drive Level +7 to +10 dBm
- Input P1 dB +4 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 HM3005 is a multi-octave 5.5 to 24 GHz microwave mixer with an IF frequency range of DC to 4 GHz. The LO is driven with +7 to +10 dBm, and as an up or downconverter features typical conversion loss of 6.5 dB, L to I isolation of 25 dB, and L to R isolation of 28 dB. Maximum Input power is +20dBm.

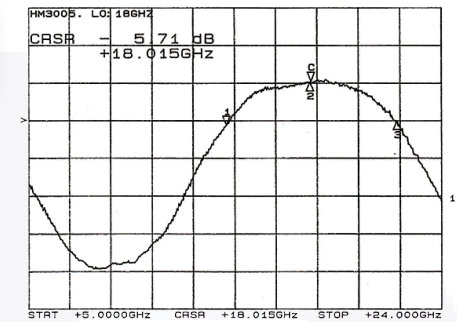
The HM3005 is RoHS compliant.



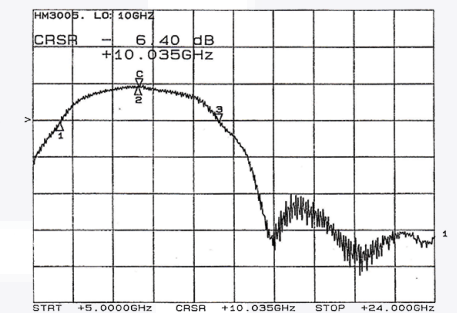
The Advanced Microwave Mixer offers an ultra wideband matching structure with a quad matched monolithic Schottky barrier diode, resulting in a broad band mixer with low conversion loss and low spurious response. The planar construction allows optimum phase and amplitude matching and tracking over a wide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

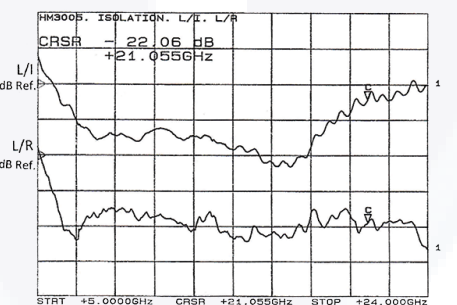
CH1: A -M - 5.71 dB  
5.0 dB/ REF - 11.00 dB Conversion Loss @ Fixed LO



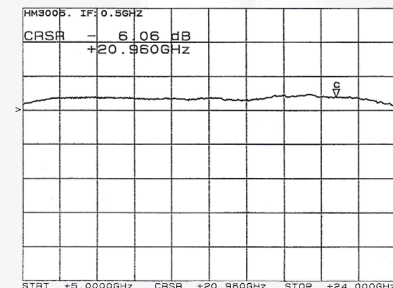
CH1: A -M - 6.40 dB  
5.0 dB/ REF - 11.00 dB Conversion Loss @ Fixed LO



CH1: A -M - 22.06 dB  
5.0 dB/ REF - 20.00 dB ISOLATION

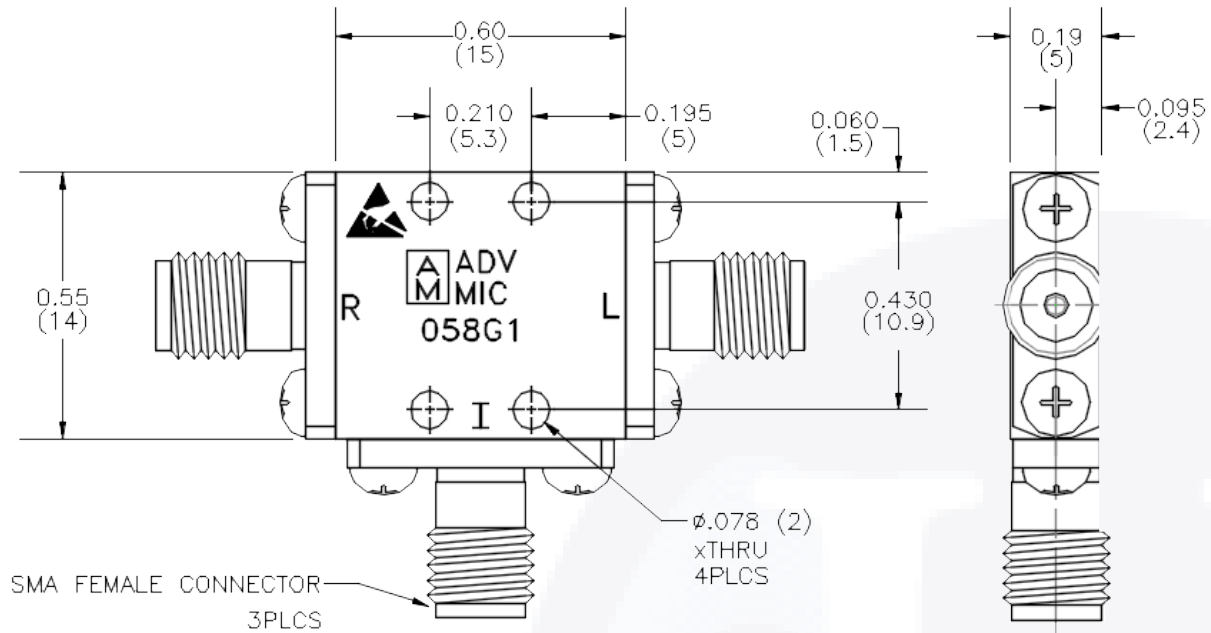


CH1: A -M - 6.08 dB  
10.0 dB/ REF - 10.00 dB Conversion Loss @ fixed IF



To view online, go to: <https://www.hasco-inc.com/mixers/multi-octave-microwave-mixer-sma-female-5-5-ghz-to-24-ghz-with-if-range-of-dc-to-4-ghz-lo-power-7dbm-to-10dbm/>

# HM3005 | 5.5 - 24 GHz | Outline Drawing



To view online, go to: <https://www.hasco-inc.com/mixers/multi-octave-microwave-mixer-sma-female-5-5-ghz-to-24-ghz-with-if-range-of-dc-to-4-ghz-lo-power-7dbm-to-10dbm/>

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						FINISHES: <b>SEE DATA SHEET</b>			PART NO./DRAWING NO. <h2 style="margin: 0;">HM3005</h2>		REV: -			
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