



TWO-TONE-TERMINATOR MIXER

T3-04SYZ

Features

- LO/RF 1 to 4000 MHz
- IF 1 to 4000 MHz
- 7 dB Typical Conversion Loss
- 30 dB Typical LO to RF Isolation
- Ultra-Broadband RF, LO, and IF



Electrical Specifications - Specifications guaranteed from -30 to +70°C, measured in a 50Ω system.

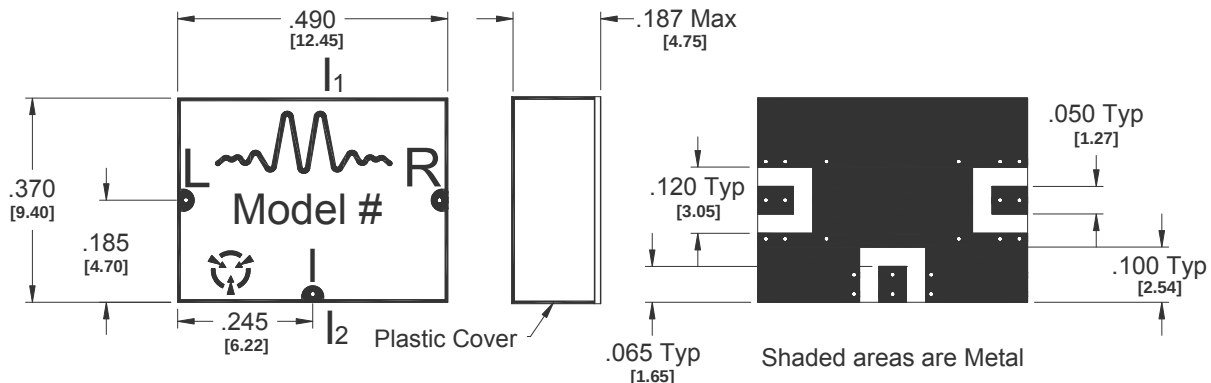
Parameter	LO (MHz)	RF (MHz)	IF (MHz)	Min	Typ	Max	Diode Option LO drive level (dBm)
Conversion Loss (dB)	1-4000 1-4000	1-4000 1-4000	1-500 1-4000		7.0 7.0	8.5 9.5	
Isolation (dB)							
LO-RF	1-4000	1-4000		25	30		
LO-IF	1-4000	1-4000		22	28		
RF-IF	1-4000	1-4000			35		
Input 1 dB Compression (dBm)	1-4000	1-4000			See Plot		S (+23 to +30)
Input Two-Tone Third Order Intercept Point (dBm)	1-4000	1-4000			See Plot		S (+23 to +30)

Part Number Options

Please specify diode level and package style by adding to model number.	
Package Style(s) ^{1,2}	Example
YZ	T3-04 <u>S</u> <u>YZ</u>

¹Connectorized test fixtures available for most carrier and surface mount packages. Consult factory.

²For non-connectorized packages, specify I-port configuration by adding -1 or -2 suffix to model number. Default is -2 configuration when not specified.



Lead and Ground Plane Finish is 100-300 μ-inches 60/40 Pb/Sn Solder Plate over Cu.
See <http://www.markimicrowave.com/menus/appnotes/an-yz-pcb.pdf> for suggested PCB layout.



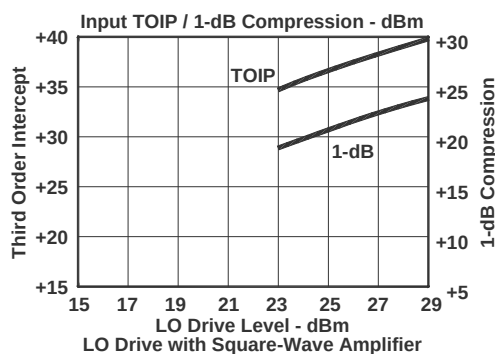
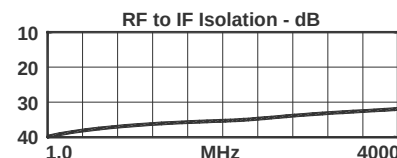
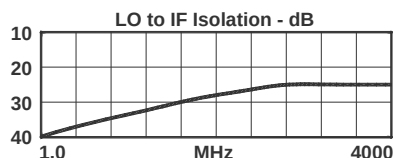
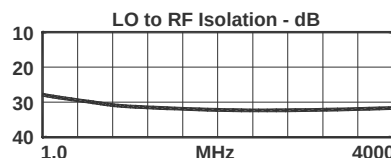
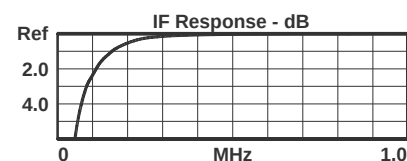
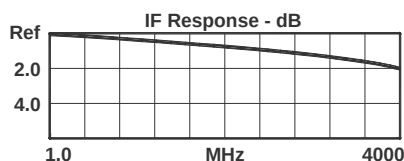
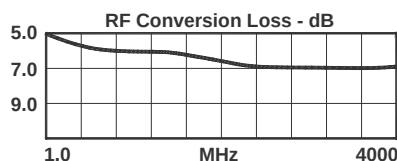
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LO/RF 1 to 4000 MHz
IF 1 to 4000 MHz

Typical Performance



DATA SHEET NOTES:

1. Mixer Conversion Loss Plot IF frequency is 100 MHz.
2. Mixer Noise Figure typically measures within 0.5 dB of conversion loss for IF frequencies greater than 5 MHz.
3. Conversion Loss typically degrades less than 0.5 dB for LO drives 2 dB below the lowest and 3 dB above highest nominal LO drive levels.
4. Conversion Loss typically degrades less than 0.5 dB at +100°C and improves less than 0.5 dB at -55°C.
5. Maximum combined RF/LO input power is +30 dBm.
6. Specifications are subject to change without notice. Contact Marki Microwave for the most recent specifications and data sheets.
7. Catalog mixer circuits are continually improved. Configuration control requires custom mixer model numbers and specifications.

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