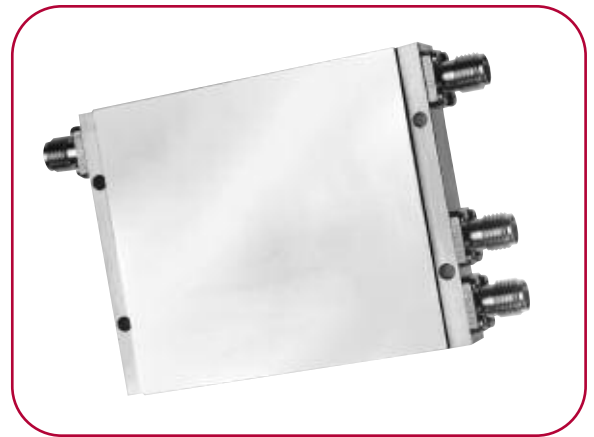


2 TO 8 GHz ENHANCED IMAGE REJECTION MIXERS

MODELS: IRE0208LI1A, IRE0208LI1B AND IRE0208LI1C

FEATURES

- RF/LO coverage 2 to 8 GHz
- Conversion loss 9 dB typical
- Image rejection 30 dB typical
- Packaging Hermetically sealed

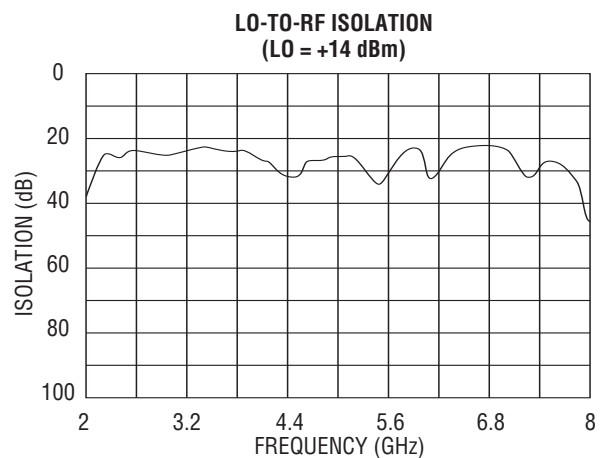
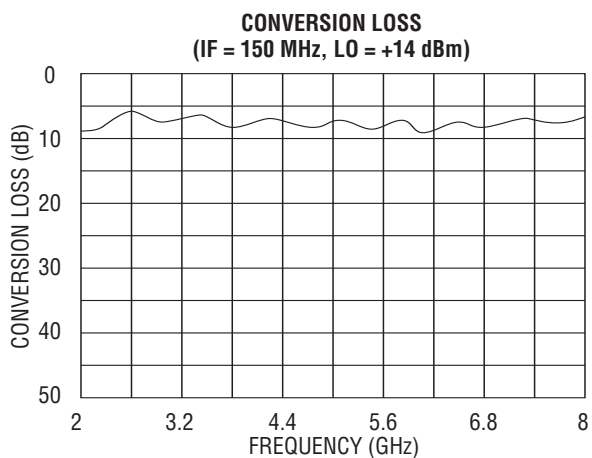
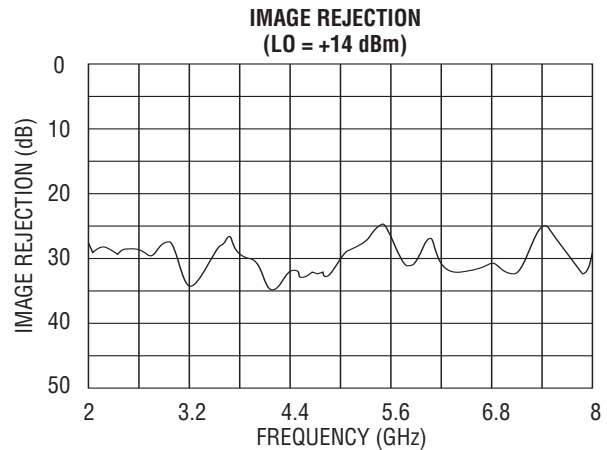
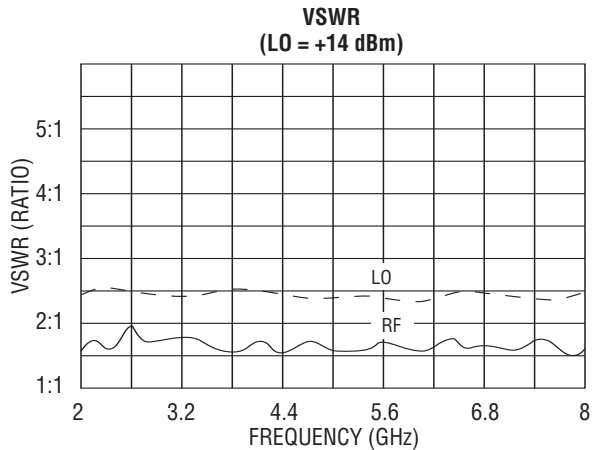


MITEQ's Model IRE0208LI1 enhanced image rejection mixer utilizes a unique architecture developed to provide greater than 30 dB of image rejection across multioctave bands. This design inherently suppresses image frequencies by an additional 15 dB over conventional image rejection mixers without the need for phase and amplitude alignment during production test, allowing for consistent reliable performance throughout production.

ELECTRICAL SPECIFICATIONS

INPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
RF frequency range		GHz	2		8
RF VSWR (RF = -10 dBm)		Ratio		2:1	
LO frequency range		GHz	2		8
LO power range	IRE0208LI1	dBm	+13	+15	+16
	IRE0208HI1	dBm	+20	+22	+23
LO VSWR		Ratio		2.5:1	
TRANSFER CHARACTERISTICS	CONDITION	UNITS	MIN.	TYP.	MAX.
Conversion loss (Note 1)		dB		9	9.5
Single-sideband noise figure		dB		10	
Image rejection (Note 1)		dB	25	30	
LO-to-RF isolation		dB	24	30	
Input power at 1 dB compression	IRE0208LI1	dBm		+8	
	IRE0208HI1	dBm		+15	
Input two-tone third-order intercept point	IRE0208LI1	dBm		+18	
	IRE0208HI1	dBm		+25	
OUTPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
IF frequency range	IRE0208LI1A	MHz	20		40
	IRE0208LI1B	MHz	40		80
	IRE0208LI1C	MHz	100		200
IF VSWR (IF = -10 dBm)		Ratio		1.5:1	

IREO208LI1C TYPICAL TEST DATA



MAXIMUM RATINGS

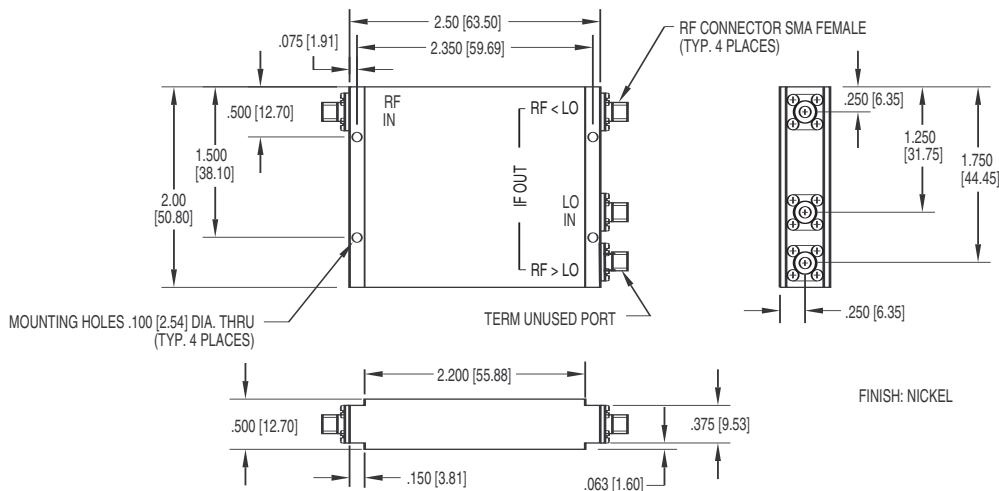
Specification temperature +25°C
 Operating temperature -54 to +85°C
 Storage temperature -65 to +125°C

GENERAL NOTE

- Unit normally aligned for operation with LO > RF. If LO < RF is desired, please specify at time of order. Operation at both modes is a special option with some degradation in performance.

NOTE: Test data supplied at 25°C; conversion loss, LO-to-RF isolation and image rejection.

OUTLINE DRAWING



NOTE: All dimensions shown in brackets [] are in millimeters.

