



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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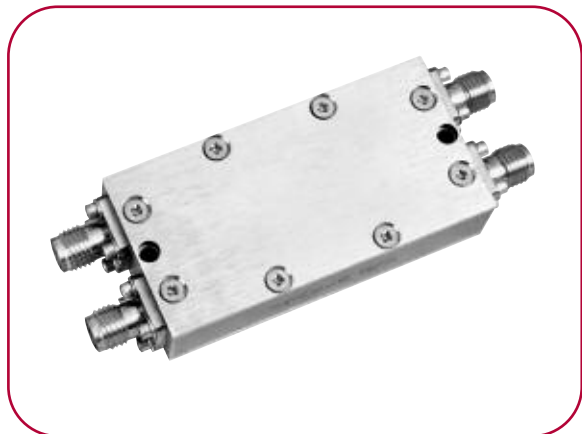


2 TO 8 GHz IMAGE REJECTION OR I/Q MIXERS

MODELS: IRM0208LC2A, IRM0208LC2B, IRM0208LC2C AND IRM0208LC2Q

FEATURES

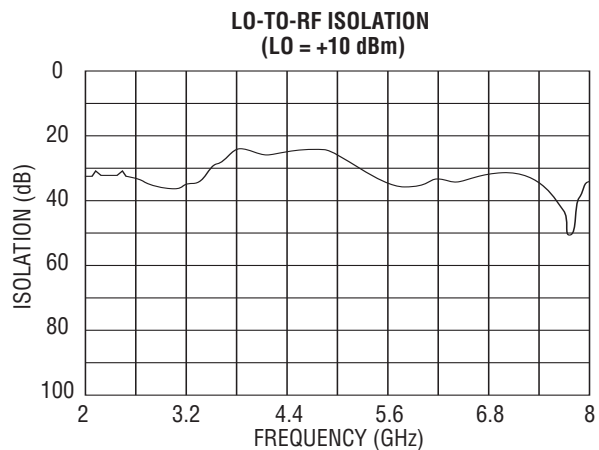
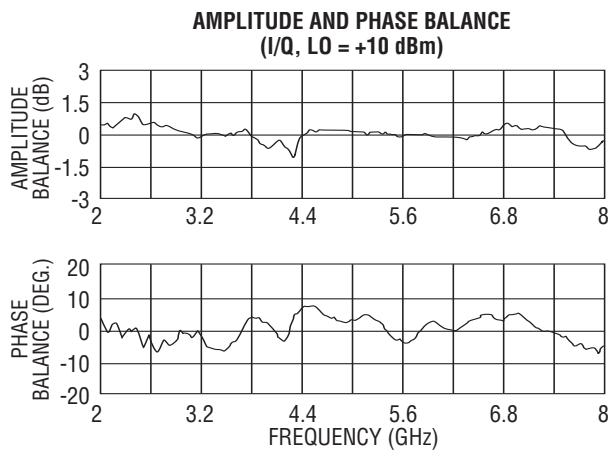
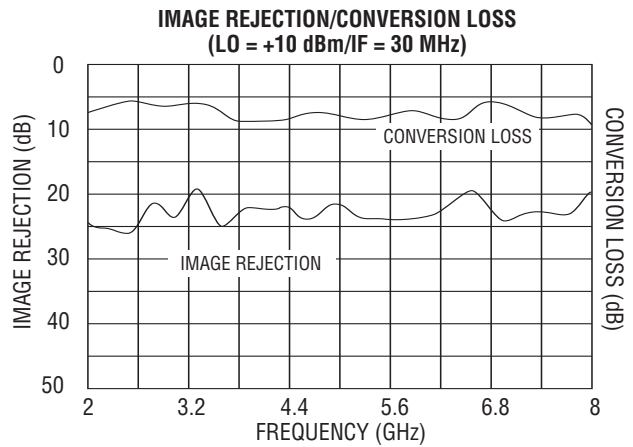
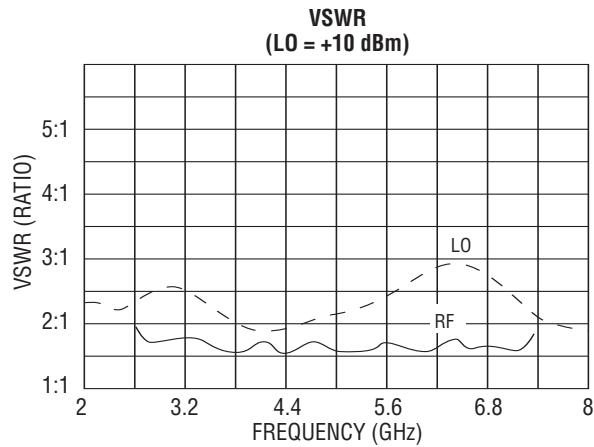
- RF/LO coverage 2 to 8 GHz
- IF operation DC to 0.5 GHz
- Conversion loss 8.5 dB typical
- Image rejection 20 dB typical



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	IRM0208LC2	dBm	+10	+12	+13
	IRM0208MC2	dBm	+13	+15	+16
	IRM0208HC2	dBm	+17	+18	+20
LO VSWR		Ratio		2.5:1	
TRANSFER CHARACTERISTICS	CONDITION	UNITS	MIN.	TYP.	MAX.
Conversion loss (Note 1)	RF > LO	dBm		8.5	9
	IRM0208LC2Q	dB		11.5	12
Single-sideband noise figure		dB		9.5	
Image rejection (Note 1)	RF < LO	dB	18	20	
LO-to-RF isolation		dB	18	20	
LO-to-IF isolation		dB		20	
Input power at 1 dB compression	IRM0208LC2	dBm		+6	
	IRM0208MC2	dBm		+10	
	IRM0208HC2	dBm		+15	
Input two-tone third-order intercept point	IRM0208LC2	dBm		+16	
	IRM0208MC2	dBm		+20	
	IRM0208HC2	dBm		+25	
Amplitude balance	IRM0208LC2Q	dB			±1.5
Phase balance	IRM0208LC2Q	Degrees			±10
Truth table	IRM0208LC2Q		PORT	RF < LO	RF > LO
			I	0	-90
			Q	-90	0
OUTPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
IF frequency (image rejection mode)	IRM0208LC2A	MHz	20		40
	IRM0208LC2B	MHz	40		80
	IRM0208LC2C	MHz	100		200
IF frequency (QIFM, I/Q demodulator mode)	IRM0208LC2Q	MHz	DC		500
IF VSWR (IF = -10 dBm)		Ratio		1.5:1	

IRM0208LC2A TYPICAL TEST DATA



MAXIMUM RATINGS

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

GENERAL NOTES

- Standard catalog unit aligned and tested for guaranteed RF > LO performance. RF < LO guaranteed performance is available, please contact MITEQ.
- For upconverter applications, please order Model Number SSM0208 Series. See Modulator section of catalog.

NOTE: Test data supplied at 25°C; conversion loss, LO-to-RF isolation, image rejection (IF Options A, B and C), phase and amplitude balance (IF Option Q).

OUTLINE DRAWINGS

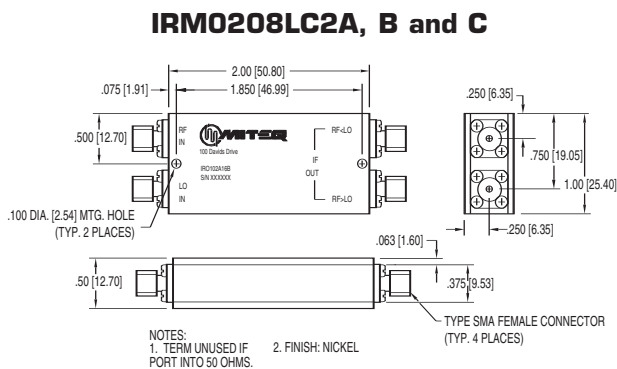
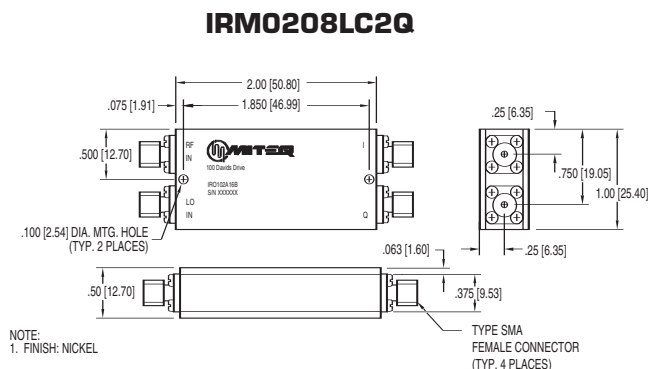


IMAGE REJECTION



QIFM, I/Q DEMODULATOR

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

