

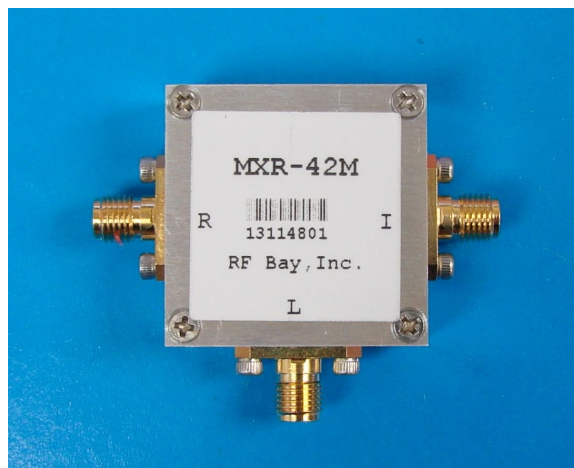
Level 13

5-4200MHz Frequency Mixer

Features

- LO/RF: 5-4200MHz
- IF: 5-3500MHz
- LO Level: +13dBm
- Conversion Loss: 9.8dB
- RF Input: Up to +9dBm
- IP3: +17dBm
- SMA Connector

Picture



Description

MXR-42M is a passive double balanced mixer operates with LO drive level range of +10dBm to +16dBm.

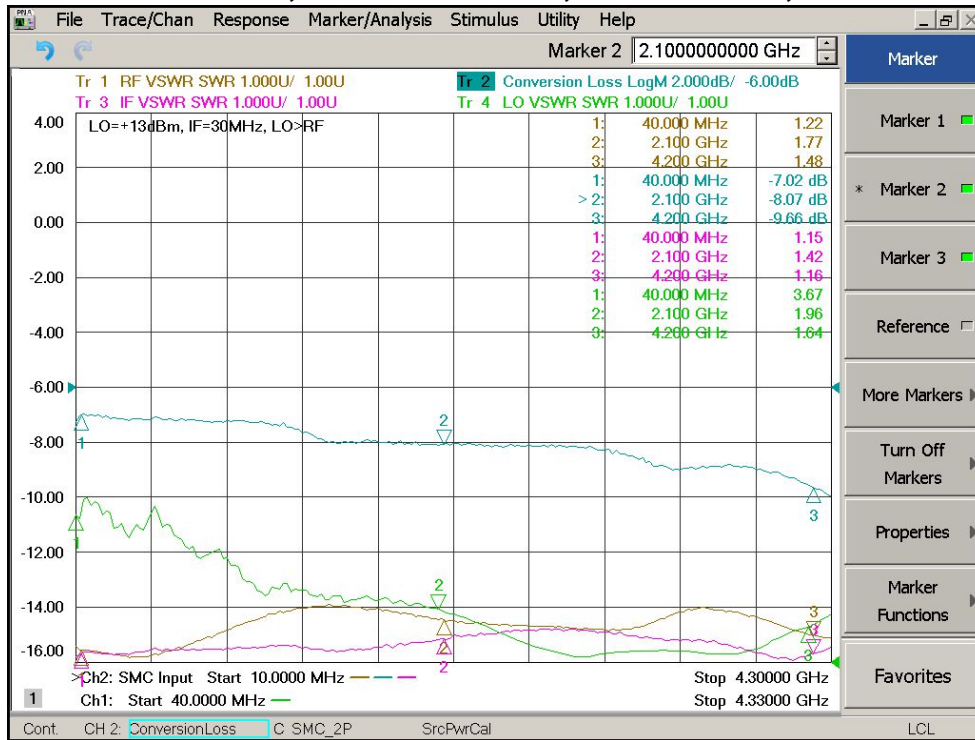
Electrical Specifications @ +25 °C, LO= +13dBm, IF=30MHz, 50Ω

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range				
LO/RF	MHz	5		4200
IF	MHz	5		3500
Conversion Loss	dB		9.8	11.8
LO-RF Isolation				
5-50 MHz	dB	28	47	
50-2100MHz	dB	20	29	
2100-4200MHz	dB	15	30	
LO-IF Isolation				
5-50MHz	dB	23	34	
50-2100MHz	dB	17	26	
2100-4200MHz	dB	17	23	
RF VSWR			2.0:1	2.5:1
IF VSWR			1.5:1	2.0:1
RF Input Power up to	dBm	+7	+9	
IP3 (Center Band)	dBm	+14	+17	

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Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, IF=30MHz



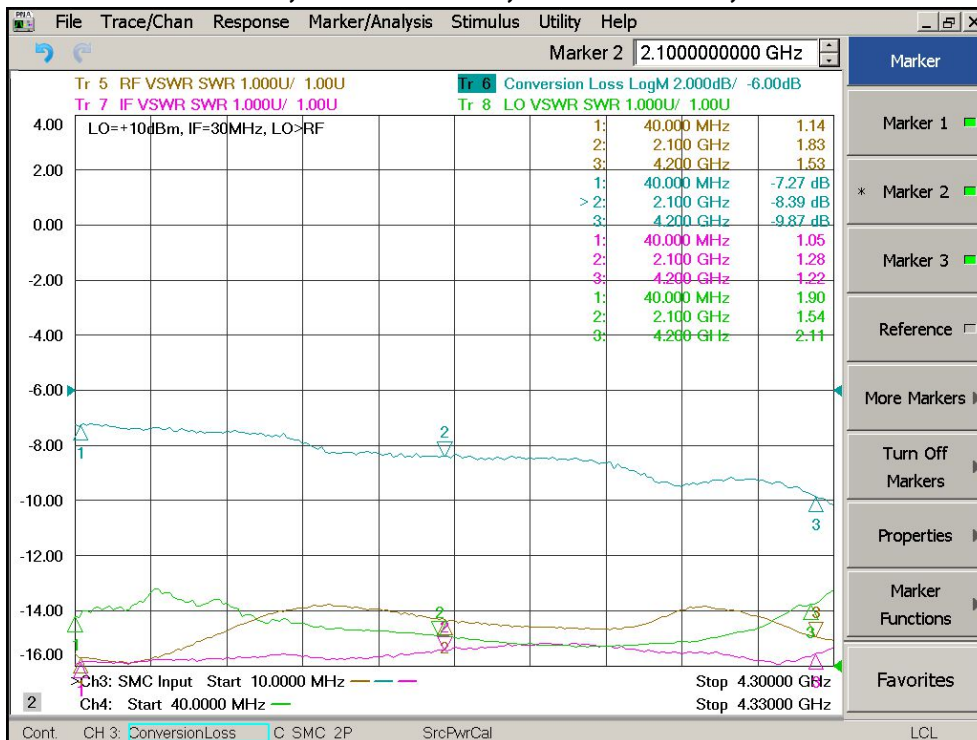
Isolation LO-RF, LO-IF, RF-IF, LO=+13dBm



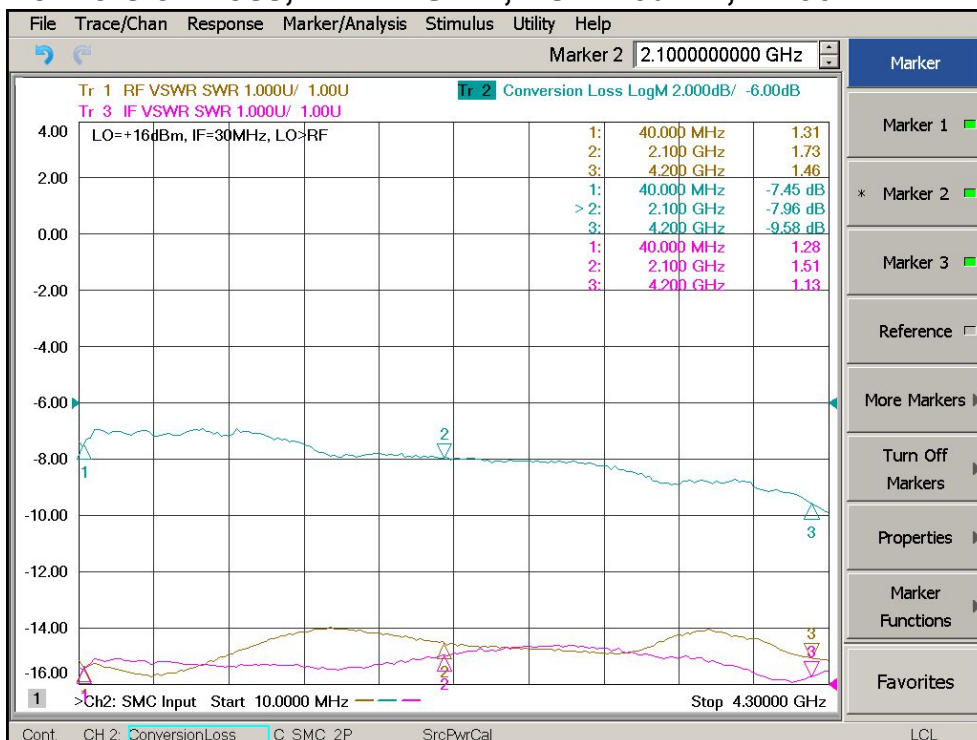
Level 13

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Conversion Loss, RF/IF VSWR, LO=+10dBm, IF=30MHz



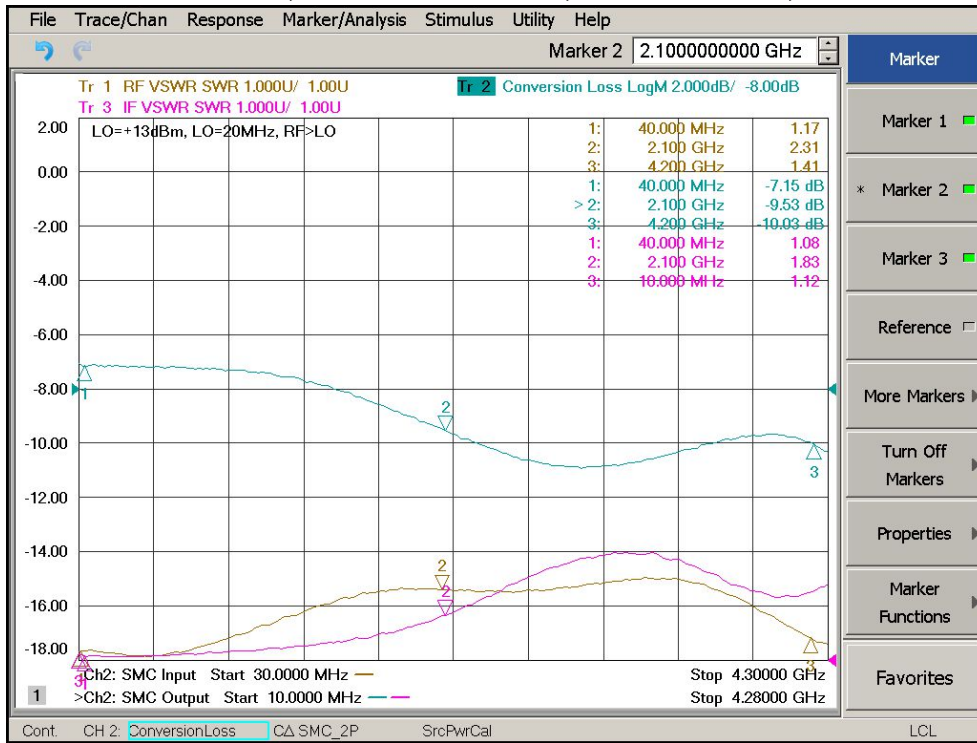
Conversion Loss, RF/IF VSWR, LO=+16dBm, IF=30MHz



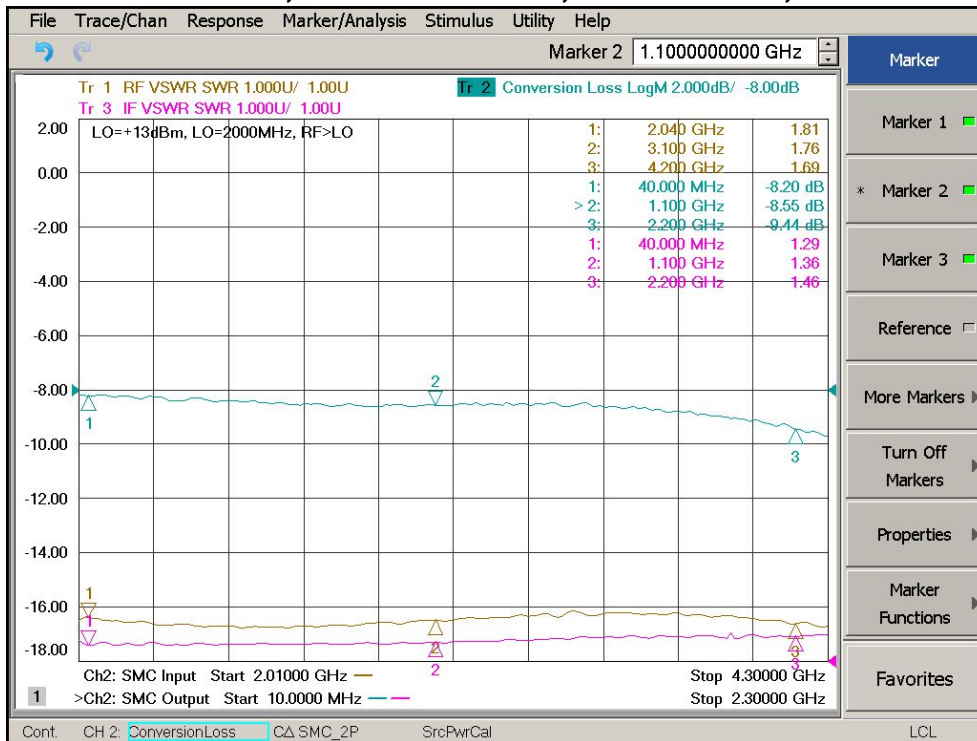
Level 13

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Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, LO=20MHz



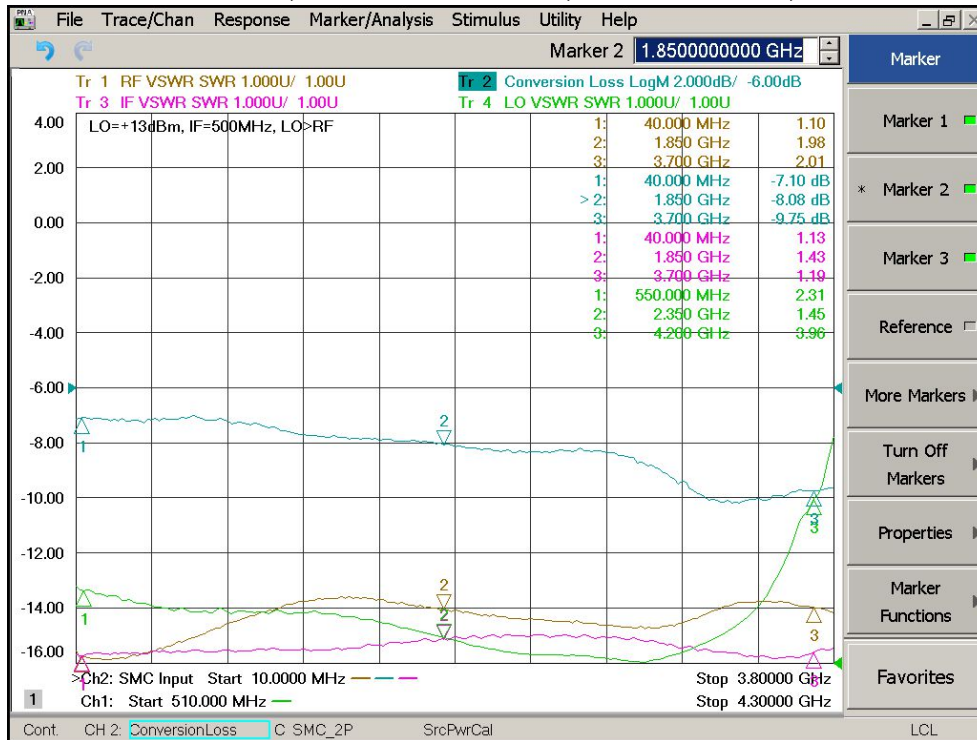
Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, LO=2000MHz



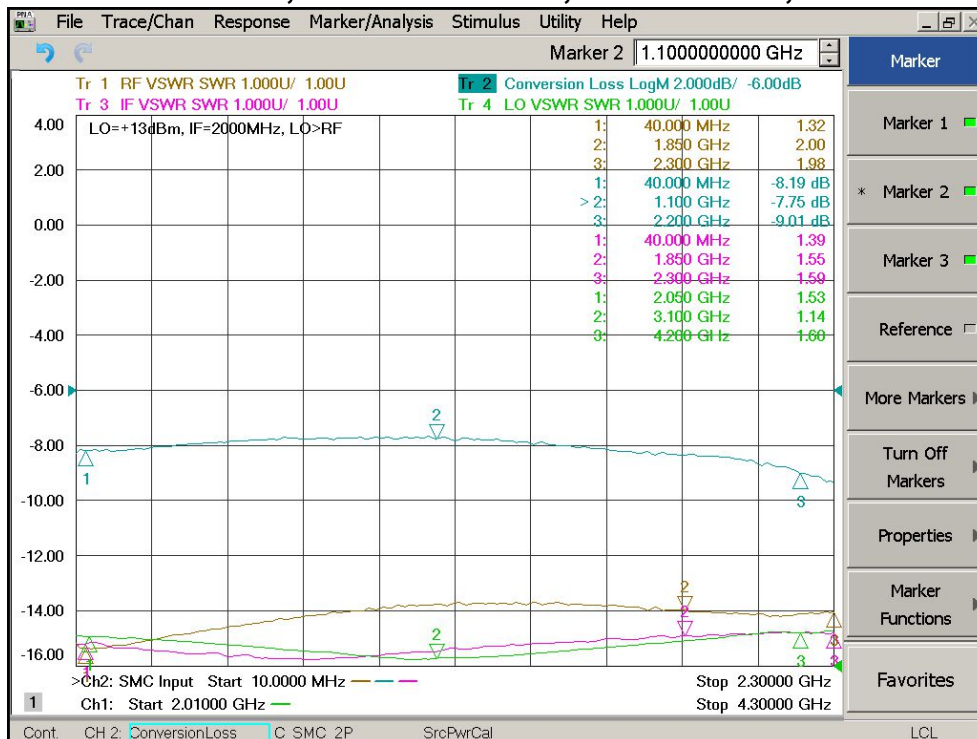
Level 13

5-4200MHz Frequency Mixer

Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, IF=500MHz



Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, IF=2000MHz



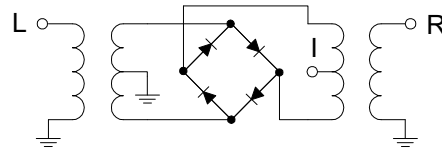
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF/IF Power	+23dBm
LO Power	+23dBm
Peak IF Current	40mA
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +100 °C

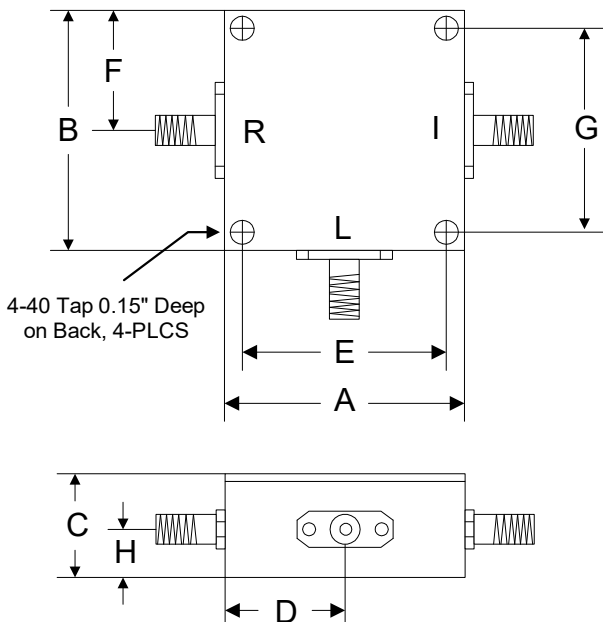
Schematic



ESD Sensitive Material



Outline



	A	B	C	D	E	F	G	H
Inch	1.250	1.250	0.563	0.625	1.000	0.625	1.000	0.250
mm	31.75	31.75	14.29	15.88	25.40	15.88	25.40	6.35