

Level 7

400-1200MHz Frequency Mixer

Features

- LO/RF: 400-1200MHz
- IF: DC-800MHz
- LO Level: +7dBm
- Conversion Loss: 6dB
- RF Input: Up to +1dBm
- Input IP3: +17dBm
- SMA Connector

Picture



Description

MXR-12 is a passive double balanced mixer operates with LO drive level range of +4dBm to +10dBm.

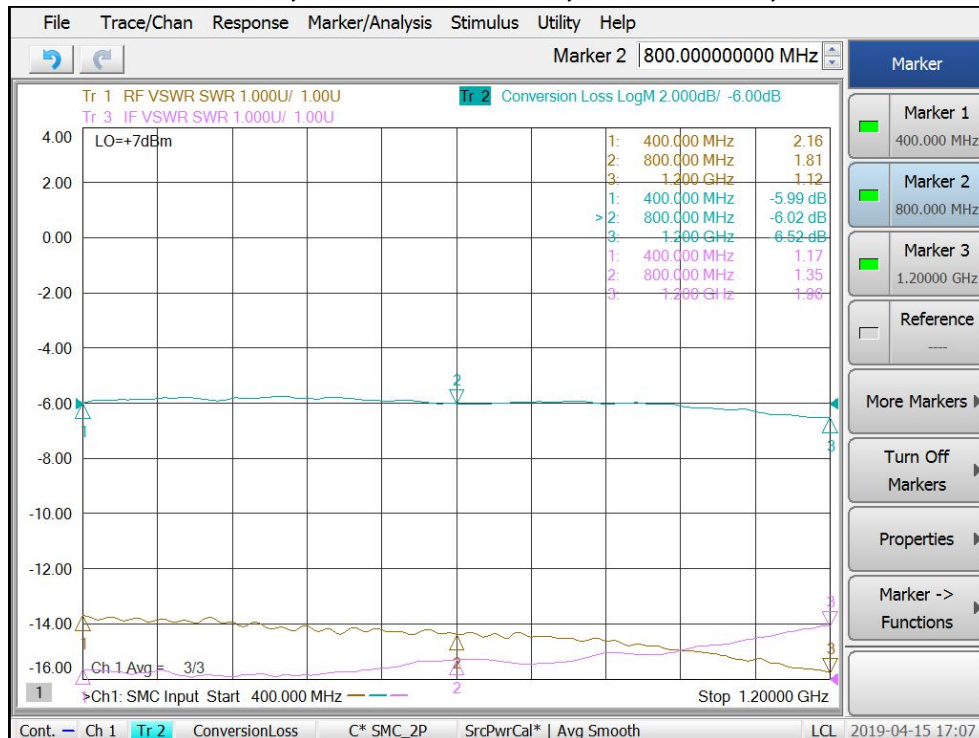
Electrical Specifications @ +25°C, IF=10MHz, LO= +7dBm, 50 Ω

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range				
LO/RF	MHz	400		1200
IF	MHz	DC		800
Conversion Loss	dB		6.0	7.5
LO-RF Isolation				
400-800 MHz	dB	30	40	
800-1200MHz	dB	25	35	
LO-IF Isolation				
400-800MHz	dB	33	43	
800-1200MHz	dB	25	35	
RF-IF Isolation				
400-800MHz	dB	10	20	
800-1200MHz	dB	10	20	
RF VSWR			1.8:1	2.5:1
IF VSWR			1.4:1	2.0:1
RF Input Power up to	dBm	-2	+1	
IP3 (Center Band)	dBm	+14	+17	

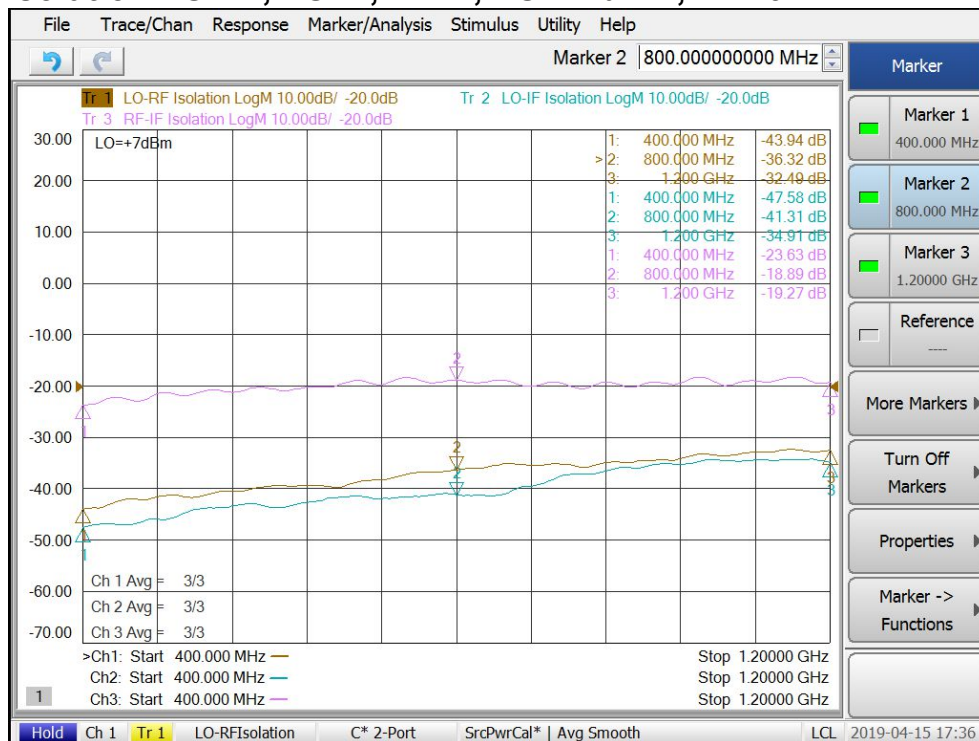
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Conversion Loss, RF/IF/LO VSWR, LO=+7dBm, IF=10MHz



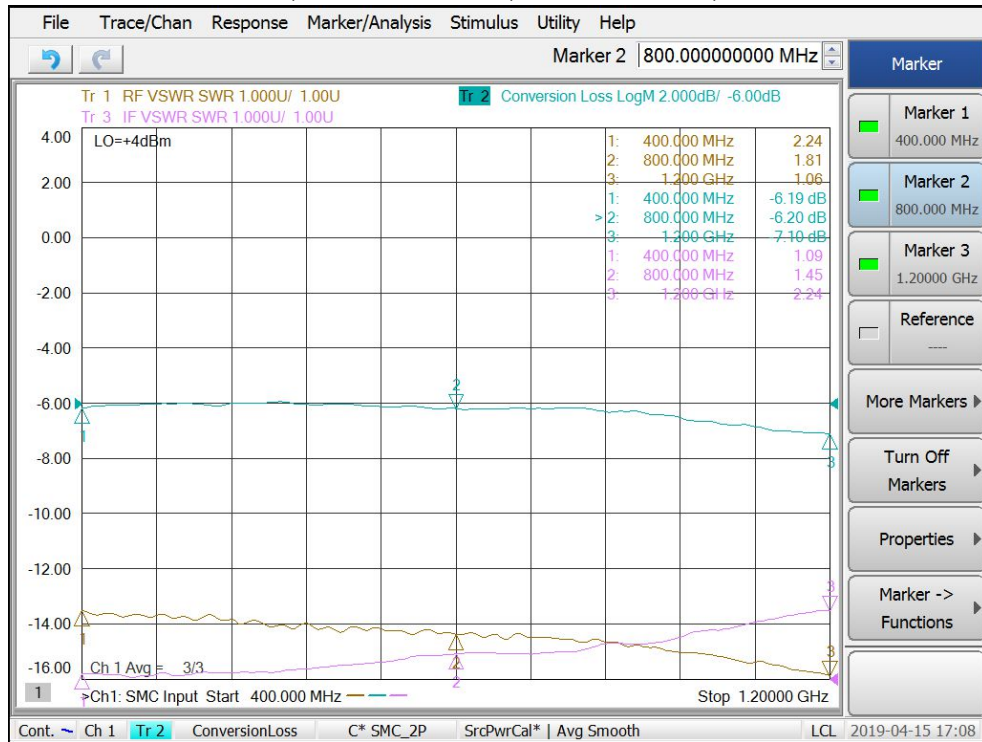
Isolation LO-RF, LO-IF, RF-IF, LO=+7dBm, IF=10MHz



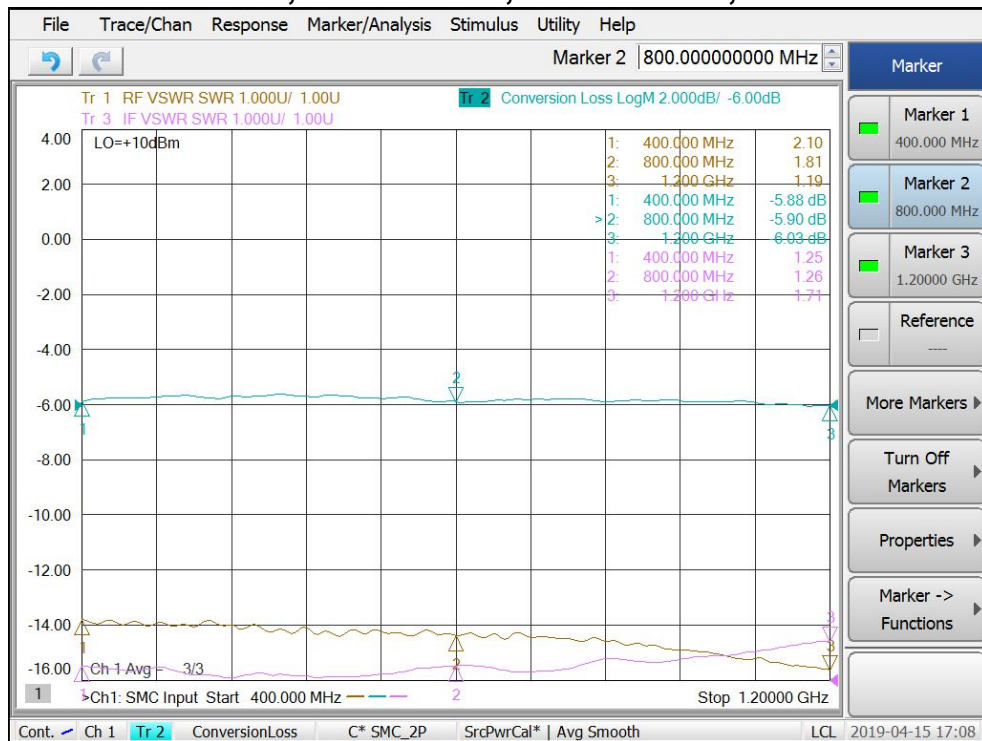
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Conversion Loss, RF/IF VSWR, LO=+4dBm, IF=10MHz



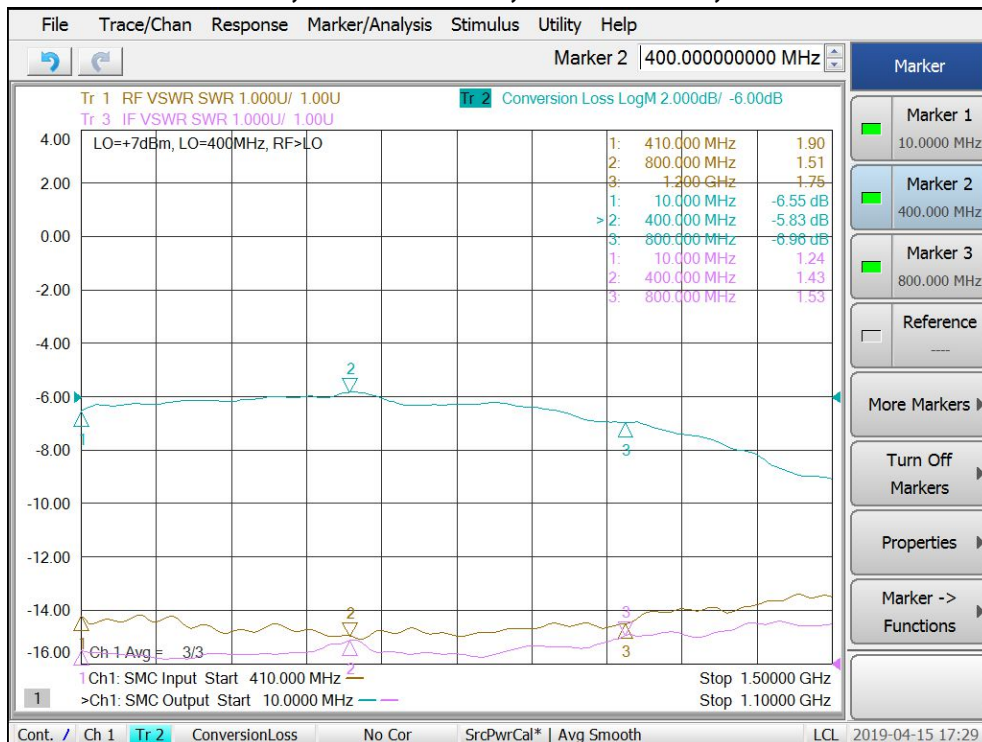
Conversion Loss, RF/IF VSWR, LO=+10dBm, IF=10MHz



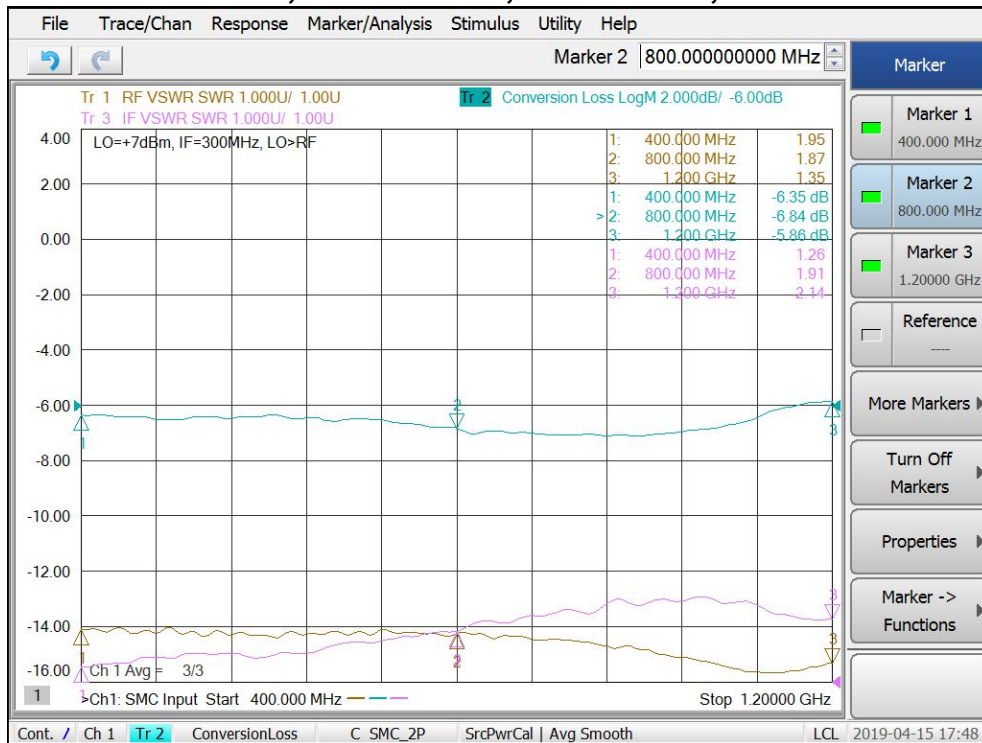
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Conversion Loss, RF/IF VSWR, LO=+7dBm, LO=400MHz



Conversion Loss, RF/IF VSWR, LO=+7dBm, IF=300MHz



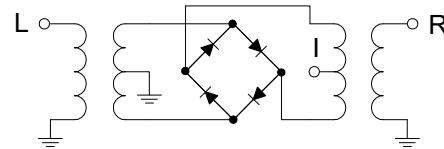
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Power	+17dBm
Peak IF Current	40mA
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +100 °C

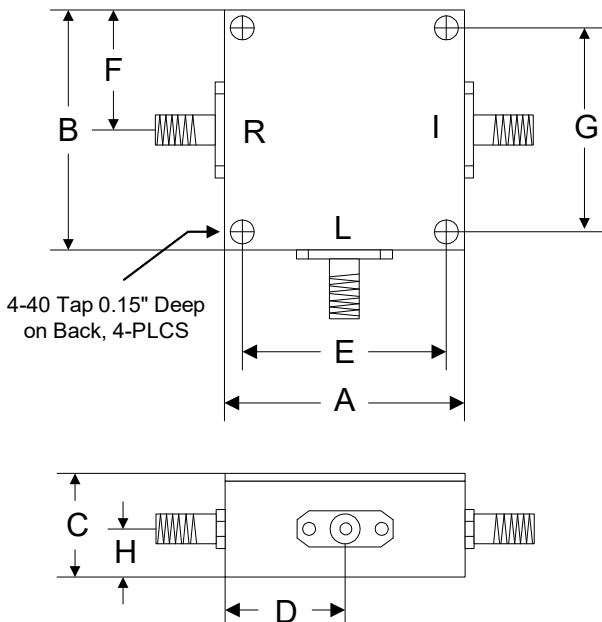
Schematic



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