

Level 13

40-2500MHz Frequency Mixer

Features

- LO/RF: 40-2500MHz
- IF: DC-1000MHz
- LO Level: +13dBm
- Conversion Loss: 8.0dB
- RF Input: Up to +9dBm
- IP3: +26dBm
- SMA Connector

Picture



Description

MXR-25DM is a high IP3 passive double balanced mixer operates with LO drive level range of +10dBm to +16dBm.

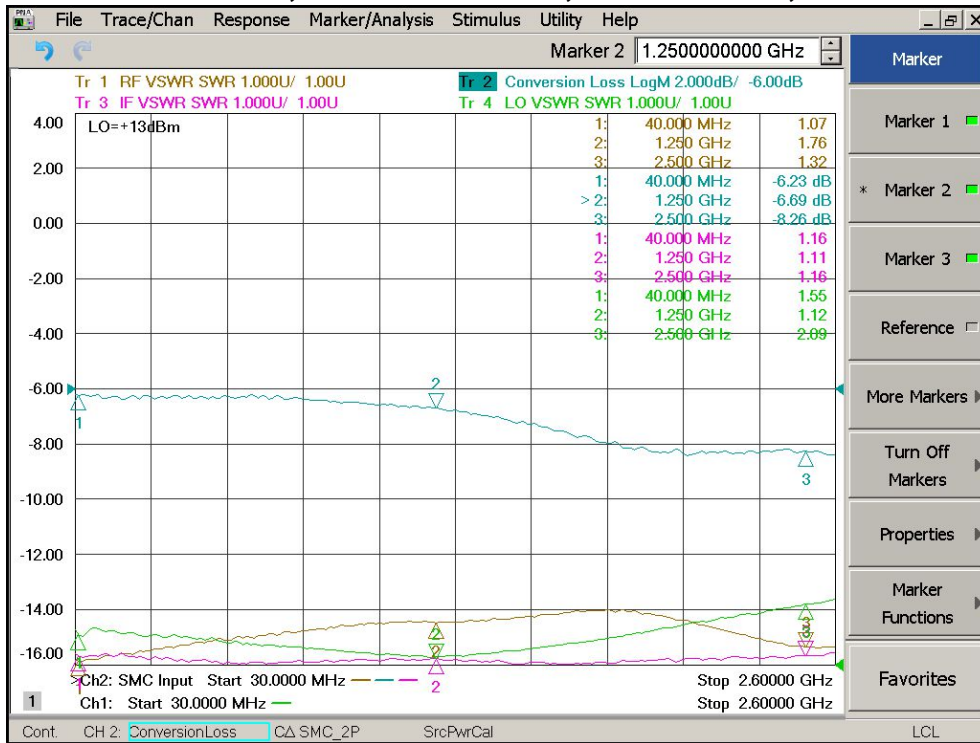
Electrical Specifications @ +25 °C, IF=70MHz, LO= +13dBm, 50 Ω

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range				
LO/RF	MHz	40		2500
IF	MHz	DC		1000
Conversion Loss	dB		8.0	9.5
LO-RF Isolation				
40-400 MHz	dB	32	47	
400-1250 MHz	dB	27	37	
1250-2500 MHz	dB	22	35	
LO-IF Isolation				
40-400 MHz	dB	28	38	
400-1250 MHz	dB	25	35	
1250-2500 MHz	dB	20	38	
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	+23	+26	

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Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, IF=70MHz



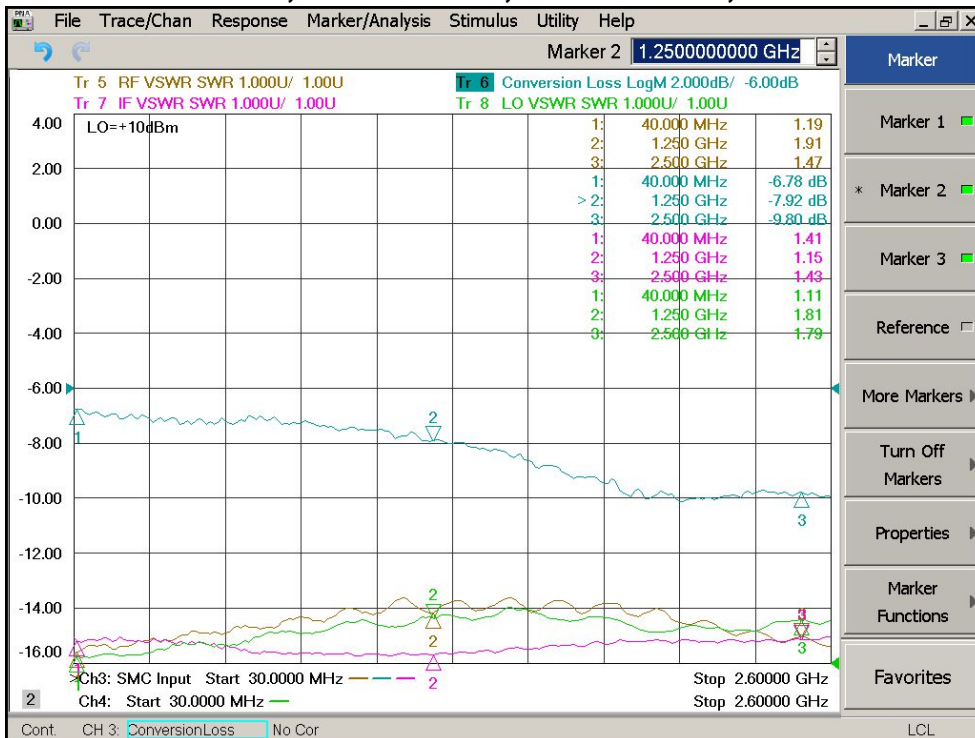
Isolation LO-RF, LO-IF, RF-IF, LO=+13dBm, IF=70MHz



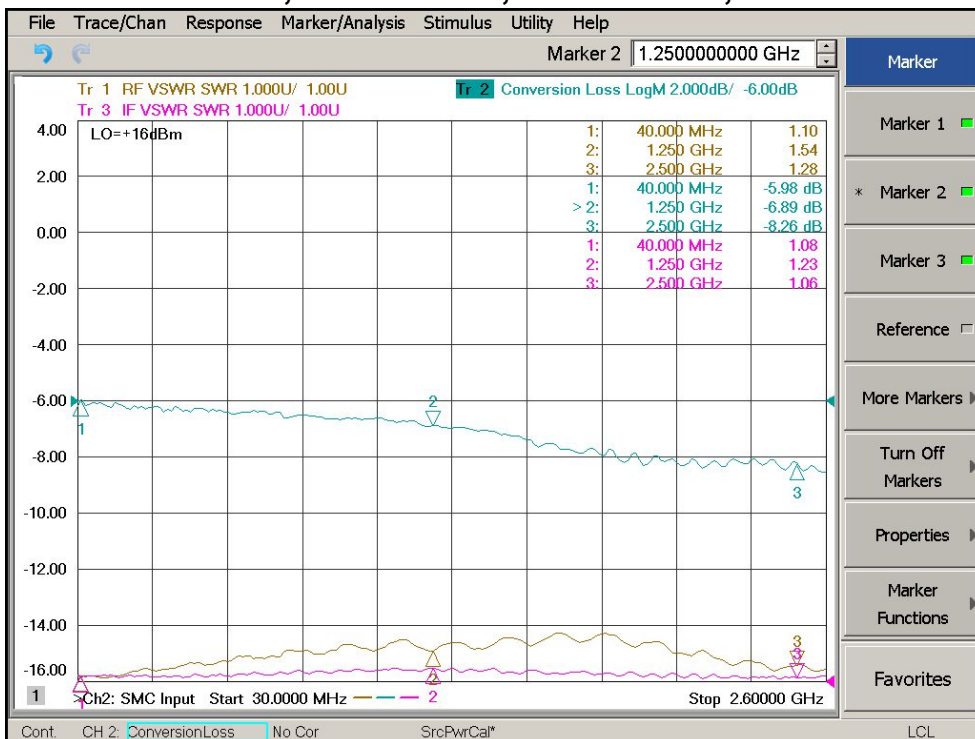
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Conversion Loss, RF/IF VSWR, LO=+10dBm, IF=70MHz



Conversion Loss, RF/IF VSWR, LO=+16dBm, IF=70MHz



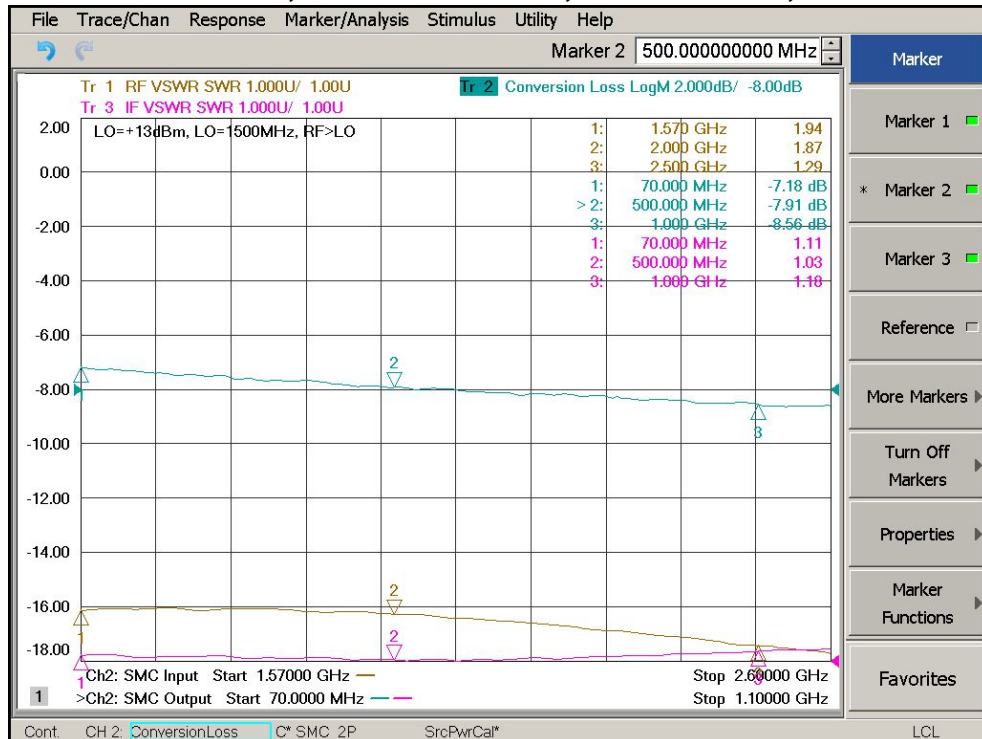
Level 13

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Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, LO=40MHz



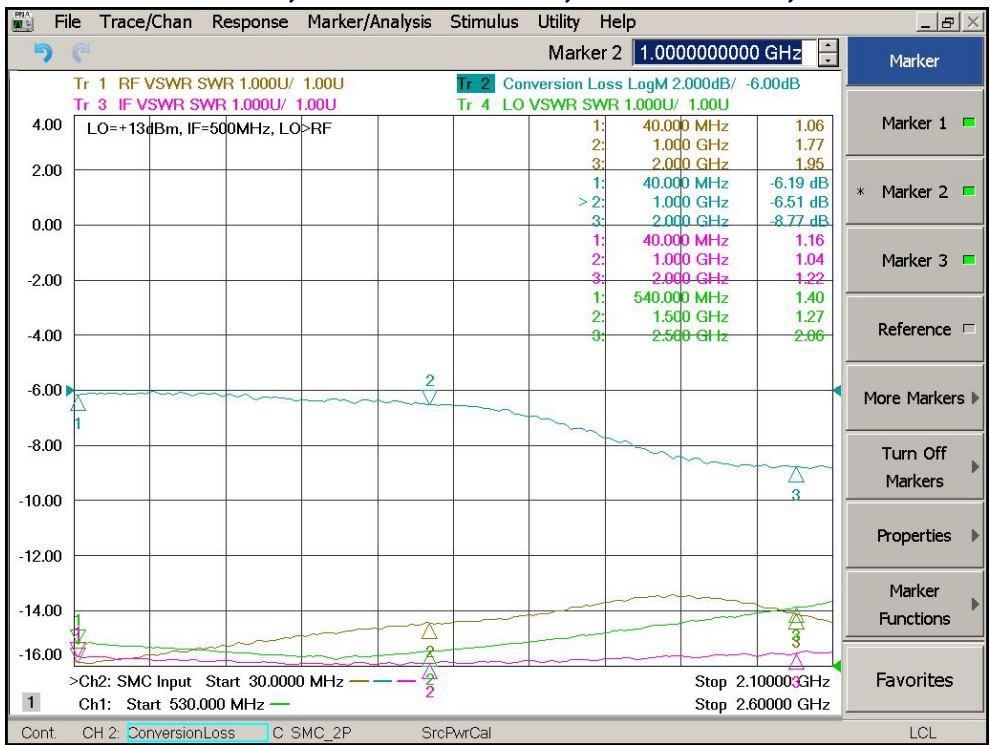
Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, LO=1500MHz



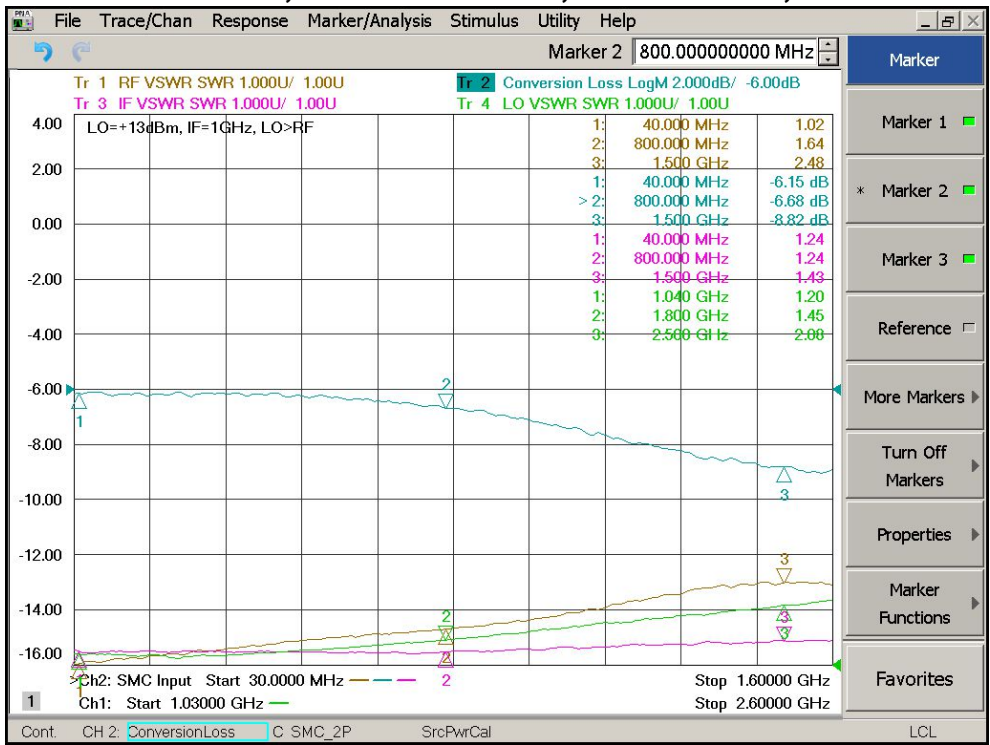
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Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, IF=500MHz



Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, IF=1000MHz



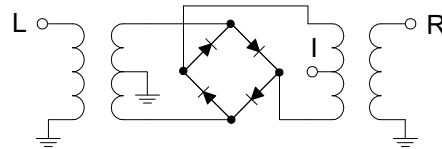
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Absolute Maximum Ratings

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

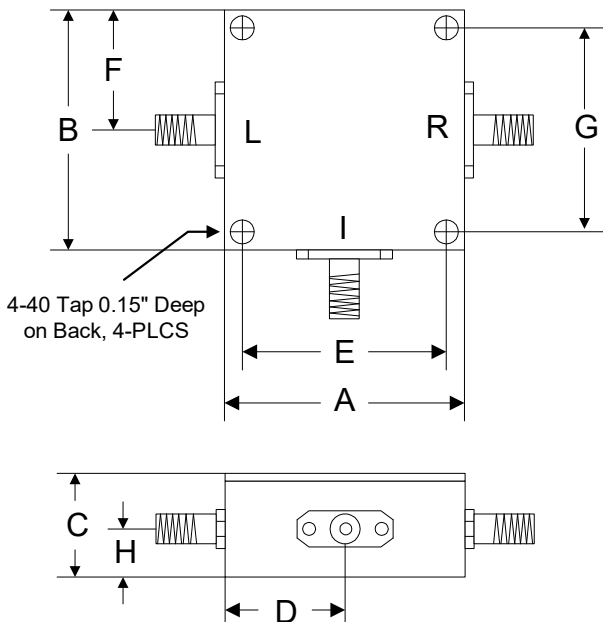
Schematic



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