

## Level 7

## 5-1500MHz Frequency Mixer

### Features

- LO/RF: 5-1500MHz
- IF: DC-1000MHz
- LO Level: +7dBm
- Conversion Loss: 7.5dB
- RF Input: Up to +1dBm
- IP3: +15dBm
- SMA Connector

### Picture



### Description

MXR-15 is a passive double balanced mixer operates with LO drive level range of +3dBm to +10dBm.

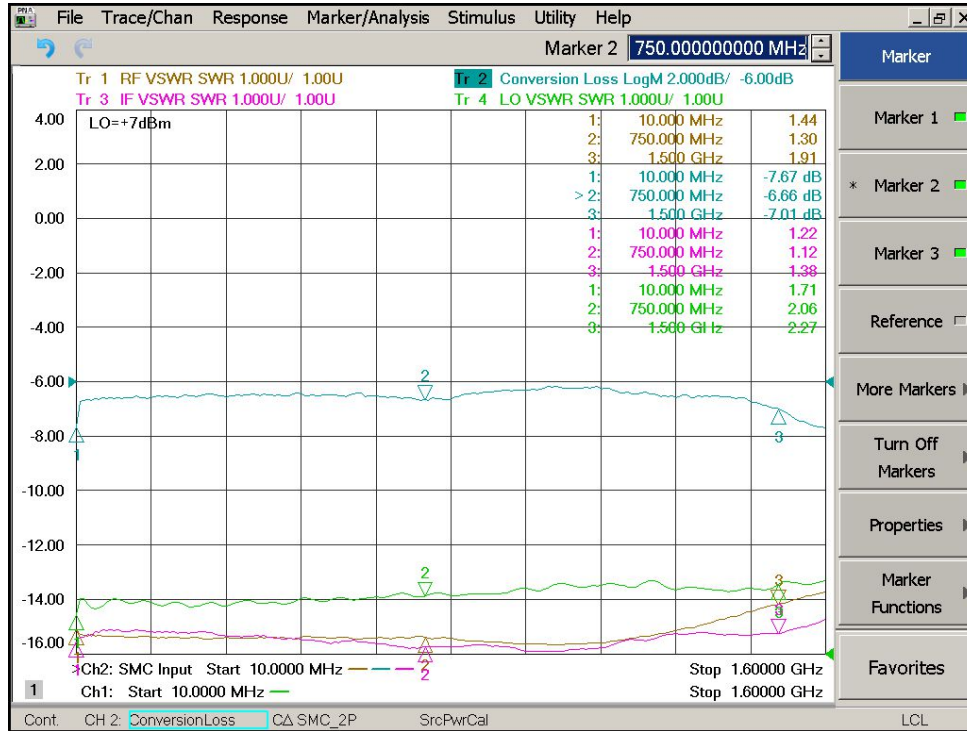
### Electrical Specifications @ +25°C, IF=10MHz, LO= +7dBm, 50 Ω

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range				
LO/RF	MHz	5		1500
IF	MHz	DC		1000
Conversion Loss	dB		7.5	9.3
LO-RF Isolation				
5-50 MHz	dB	40	50	
50-750MHz	dB	25	40	
750-1500MHz	dB	23	33	
LO-IF Isolation				
5-50MHz	dB	40	50	
50-750MHz	dB	20	30	
750-1500MHz	dB	10	20	
RF VSWR			2.0:1	2.5:1
IF VSWR			1.5:1	2.0:1
RF Input Power up to	dBm	-1	+1	
IP3 (Center Band)	dBm	+12	+15	

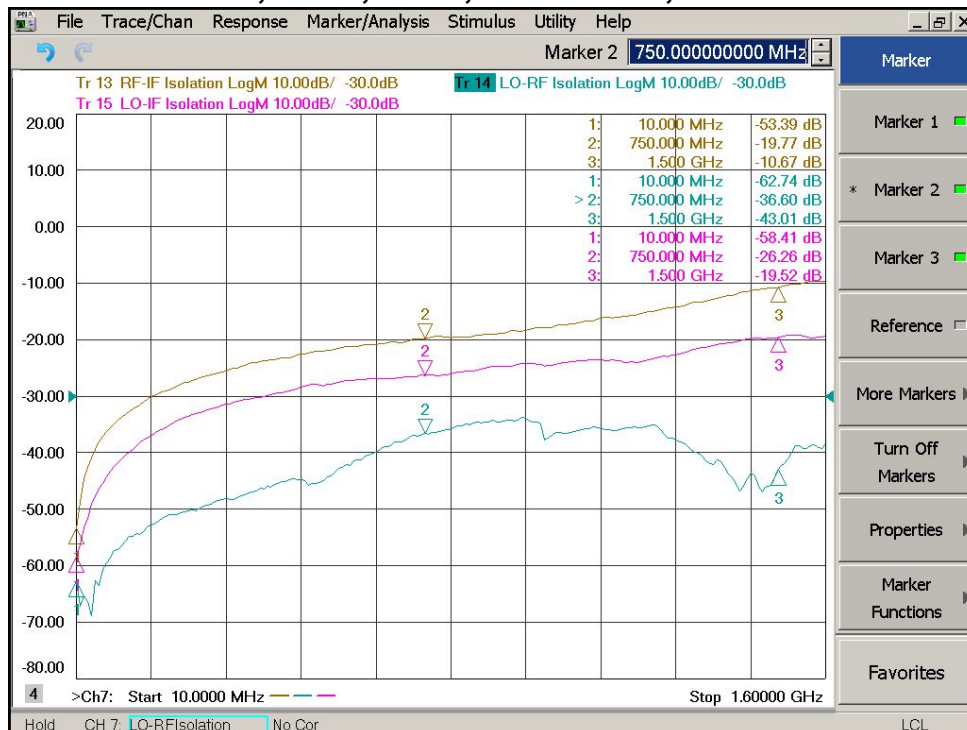
**Level 7**

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



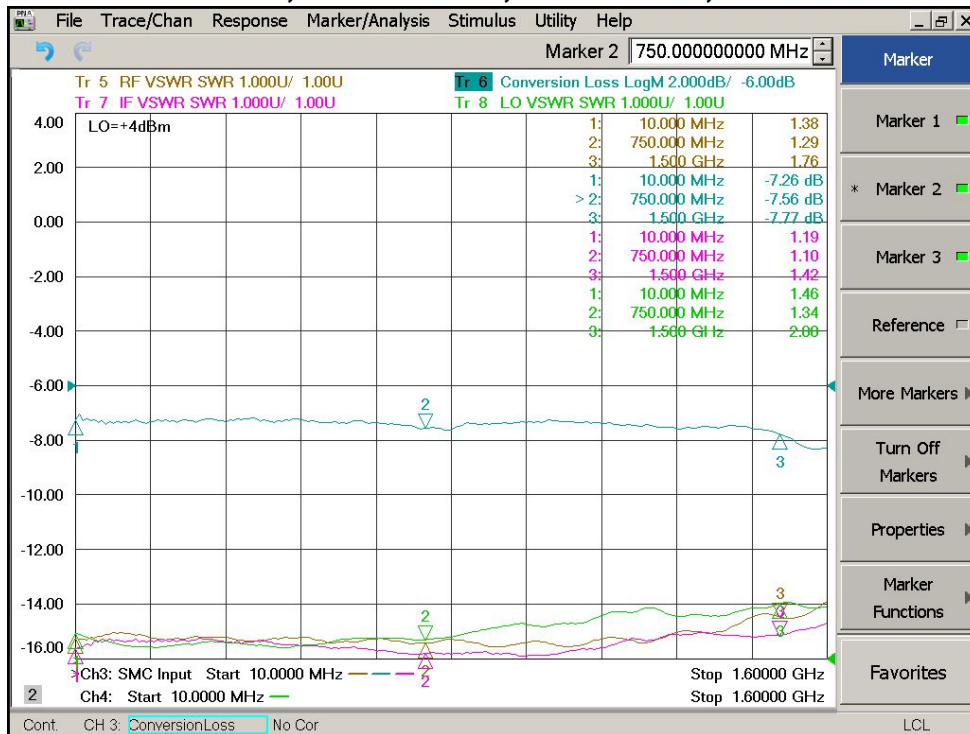
**Isolation LO-RF, LO-IF, RF-IF, LO=+7dBm, IF=10MHz**



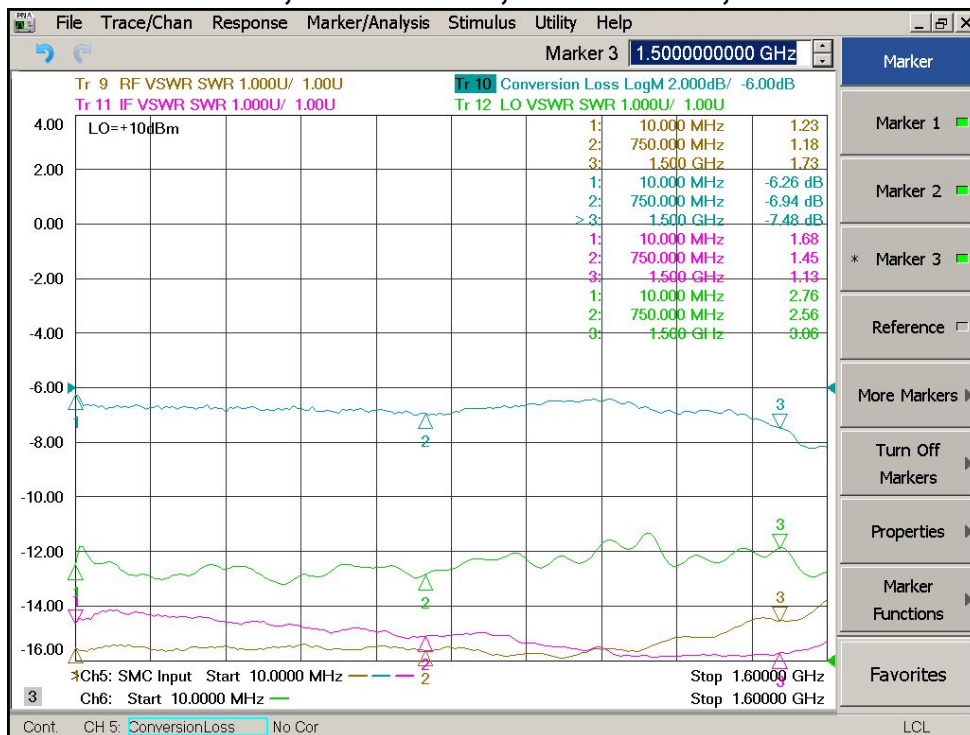
**Level 7**

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



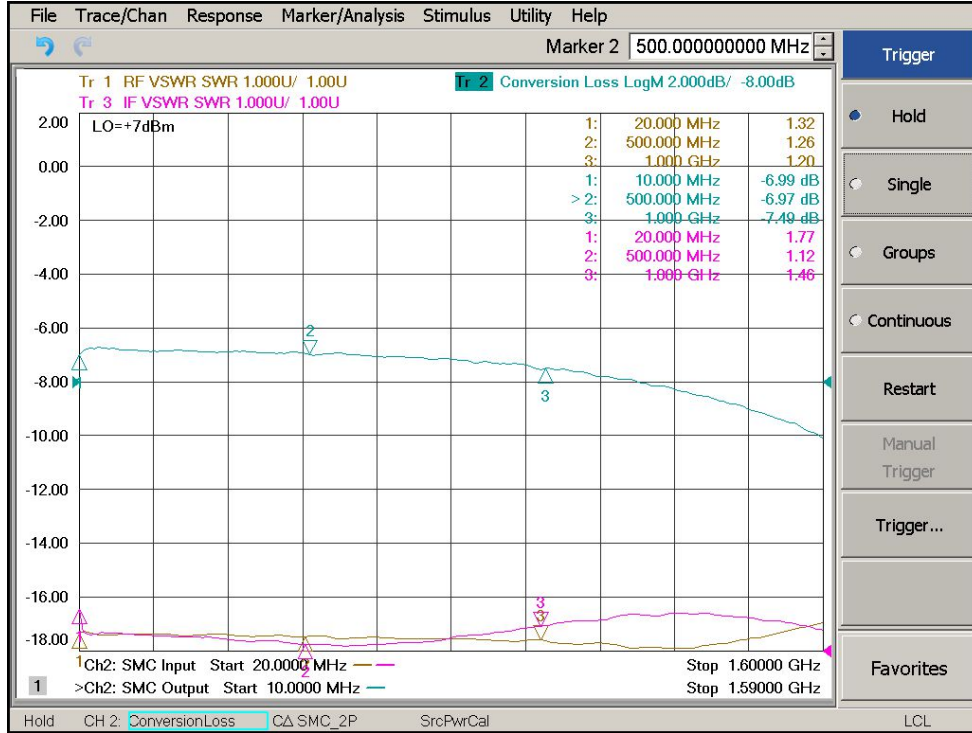
**Conversion Loss, RF/IF VSWR, LO=+10dBm, IF=10MHz**



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**IF Bandwidth, RF/IF VSWR, LO=+7dBm, LO=10MHz**



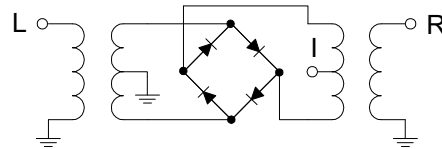
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### Absolute Maximum Ratings

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

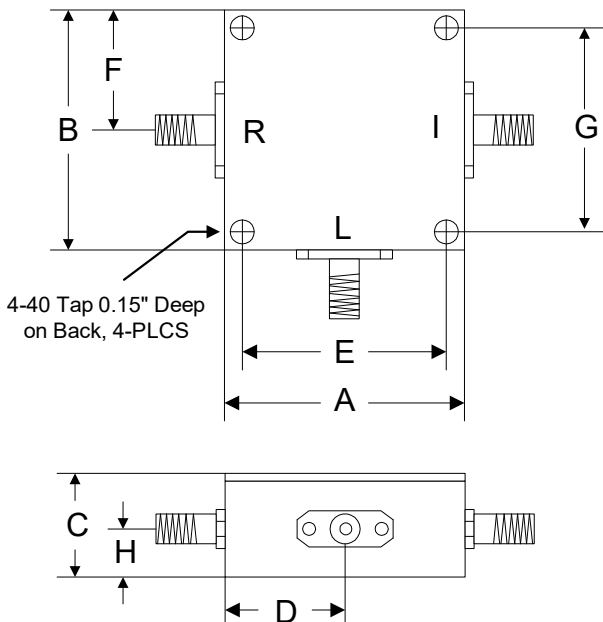
### Schematic



### 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