

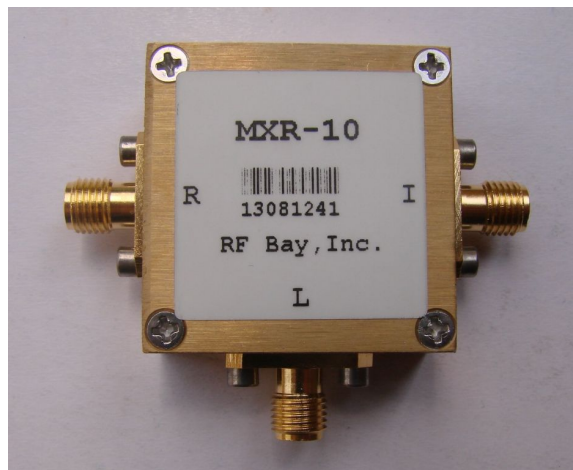
## Level 7

## 5-1000MHz Frequency Mixer

### Features

- LO/RF: 5-1000MHz
- IF: DC-1000MHz
- LO Level: +7dBm
- Conversion Loss: 7dB
- RF Input: Up to +1dBm
- Input IP3: +20dBm
- SMA Connector

### Picture



### Description

MXR-10 is a passive High IP3 double balanced mixer operates with LO drive level range of +4dBm to +10dBm.

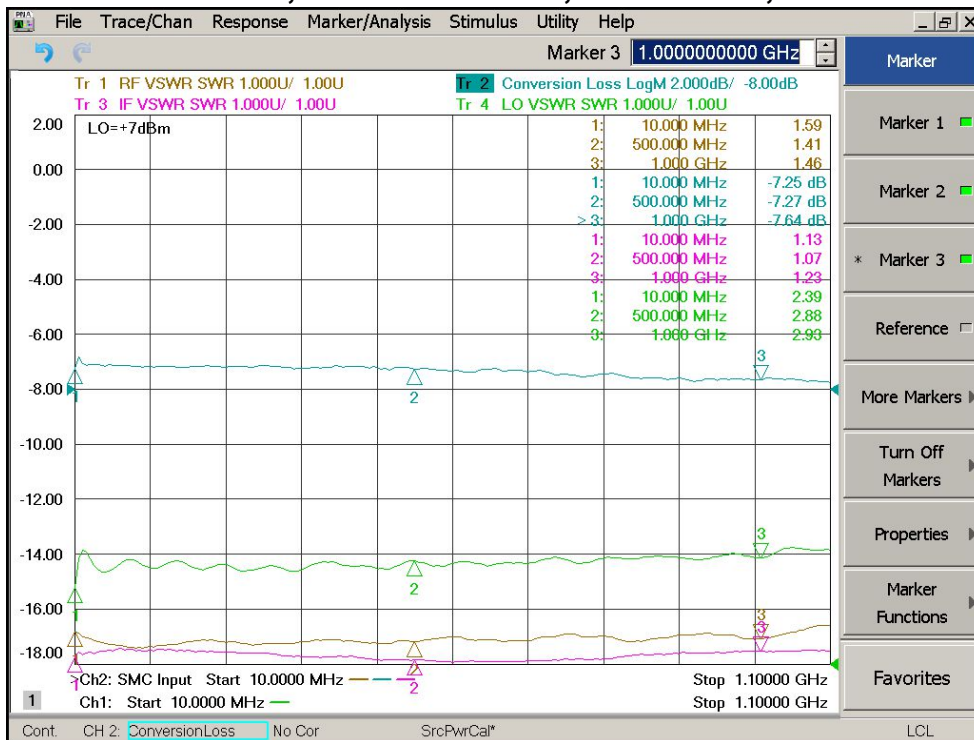
### Electrical Specifications @ +25°C, IF=10MHz, LO= +7dBm, 50 Ω

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range				
LO/RF	MHz	5		1000
IF	MHz	DC		1000
Conversion Loss	dB		7.0	8.5
LO-RF Isolation				
5-50 MHz	dB	40	60	
50-500MHz	dB	25	47	
500-1000MHz	dB	22	32	
LO-IF Isolation				
5-50MHz	dB	35	62	
50-500MHz	dB	25	45	
500-1000MHz	dB	20	32	
RF VSWR			1.5:1	2.0:1
IF VSWR			1.5:1	2.0:1
RF Input Power up to	dBm	-1	+1	
IP3 (Center Band)	dBm	+17	+20	

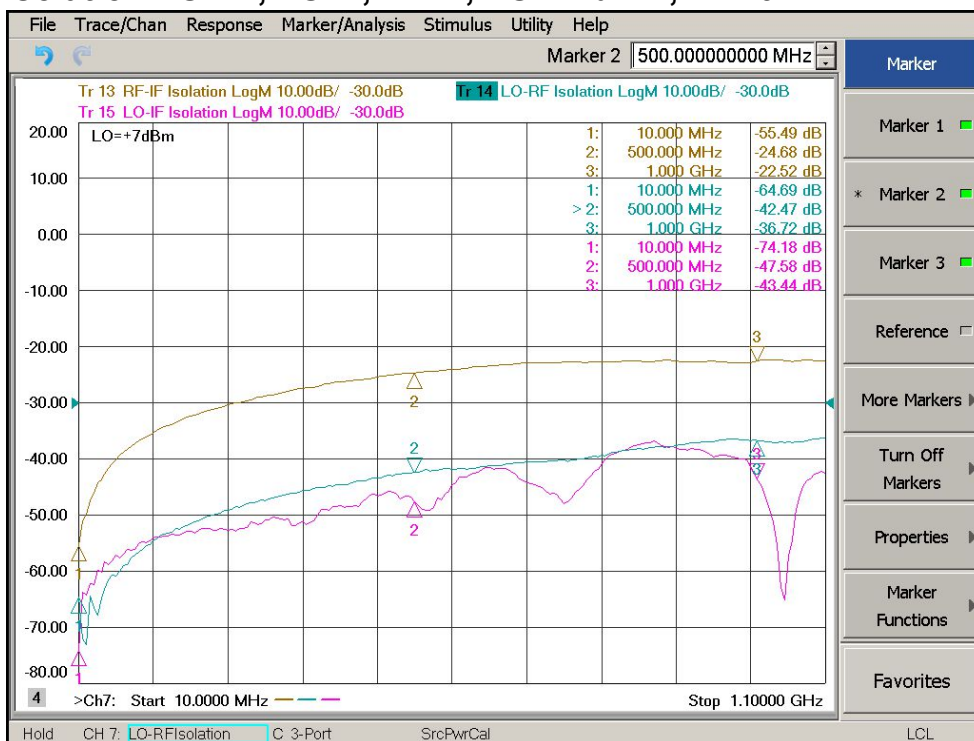
**Level 7**

**5-1000MHz Frequency Mixer**

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



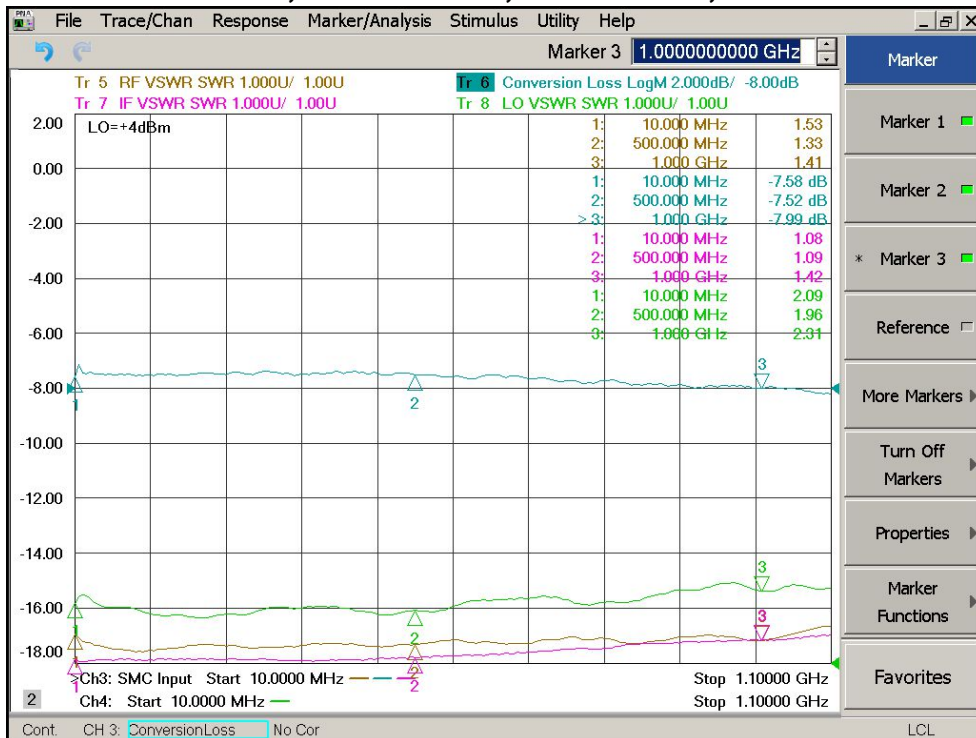
**Isolation LO-RF, LO-IF, RF-IF, LO=+7dBm, IF=10MHz**



**Level 7**

**5-1000MHz Frequency Mixer**

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



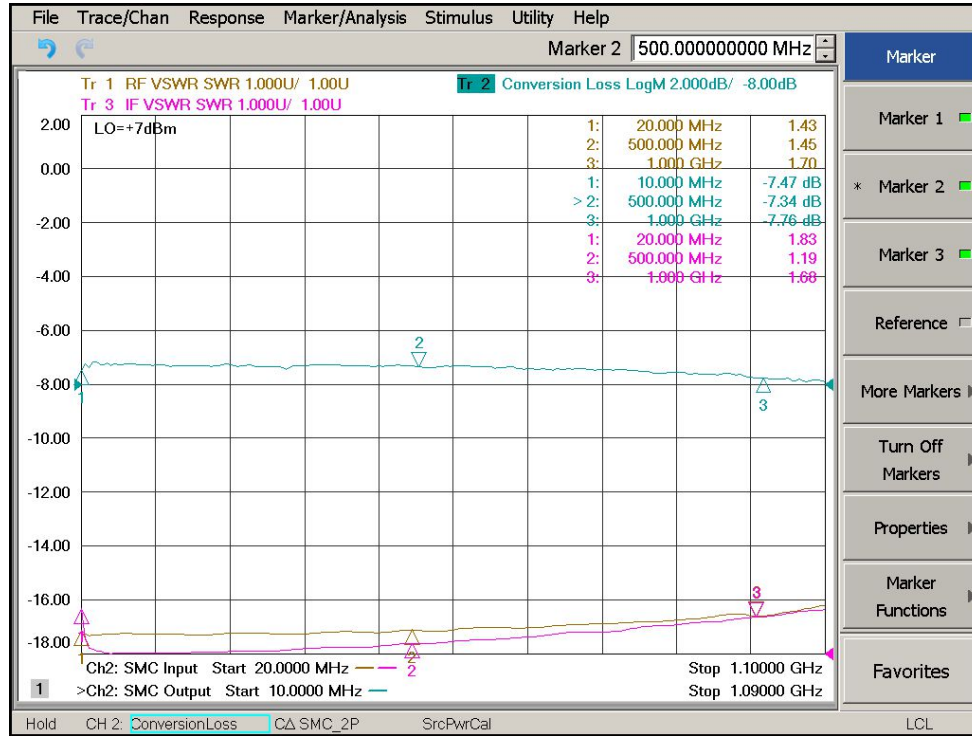
**Conversion Loss, RF/IF VSWR, LO=+10dBm, IF=10MHz**



**Level 7**

**5-1000MHz Frequency Mixer**

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



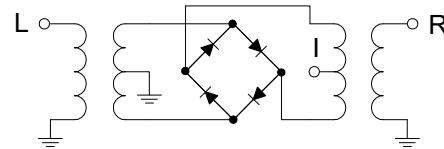
**Level 7**

**5-1000MHz Frequency Mixer**

**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

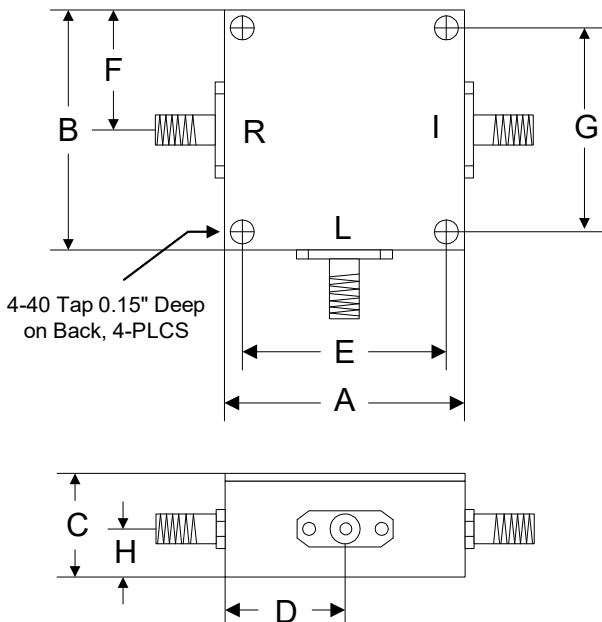
**Schematic**



**ESD Sensitive Material**



**Outline**



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