

## Level 17

## 1-2700MHz Frequency Mixer

### Features

- LO/RF: 1-2700MHz
- IF: 1-2000MHz
- LO Level: +17dBm
- Conversion Loss: 7dB
- RF Input: Up to +13dBm
- Input IP3: +27.8dBm
- SMA Connector

### Picture



### Description

MXR-27H is a passive wide band double balanced mixer operates with LO drive level range of +14dBm to +20dBm.

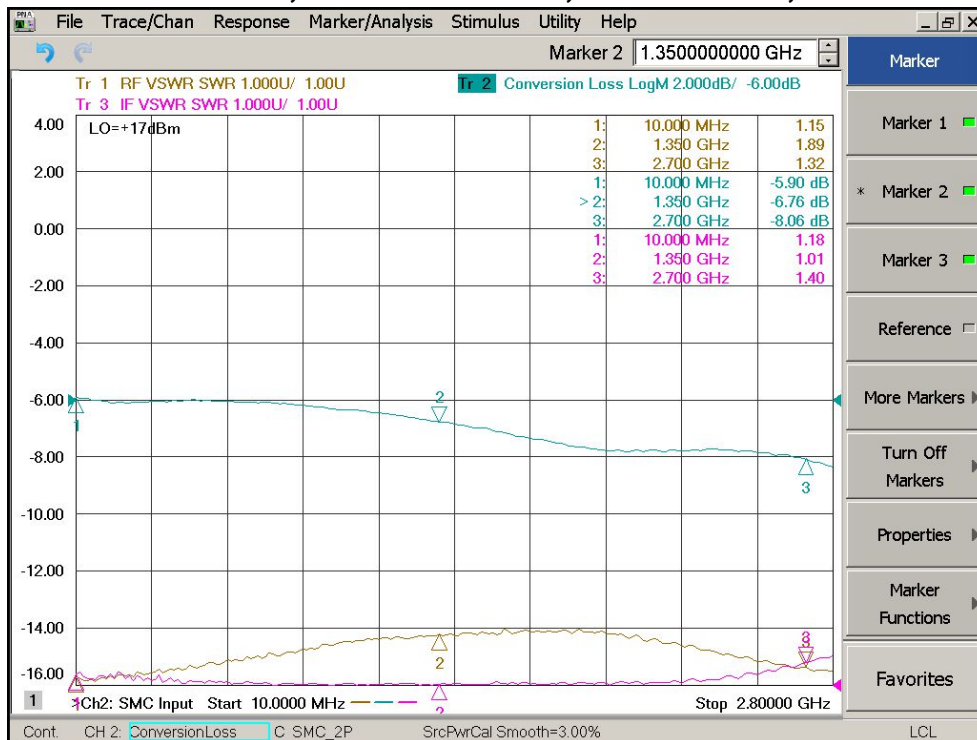
### Electrical Specifications @ +25°C, IF=100MHz, LO= +17dBm, 50 Ω

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range				
LO/RF	MHz	1		2700
IF	MHz	1		2000
Conversion Loss	dB		7.0	9.5
LO-RF Isolation				
10-1500 MHz	dB	21	38	
10-2200MHz	dB	17	36	
LO-IF Isolation				
10-2000MHz	dB	20	31	
10-2200MHz	dB	16	33	
RF-IF Isolation				
10-2200MHz	dB	20	25	
RF VSWR			2.0:1	2.5:1
IF VSWR			1.5:1	2.0:1
LO VSWR			1.5:1	2.5:1
RF Input Power up to	dBm	+10	+13	
IIP3 (Center Band)	dBm	+25	+27.8	

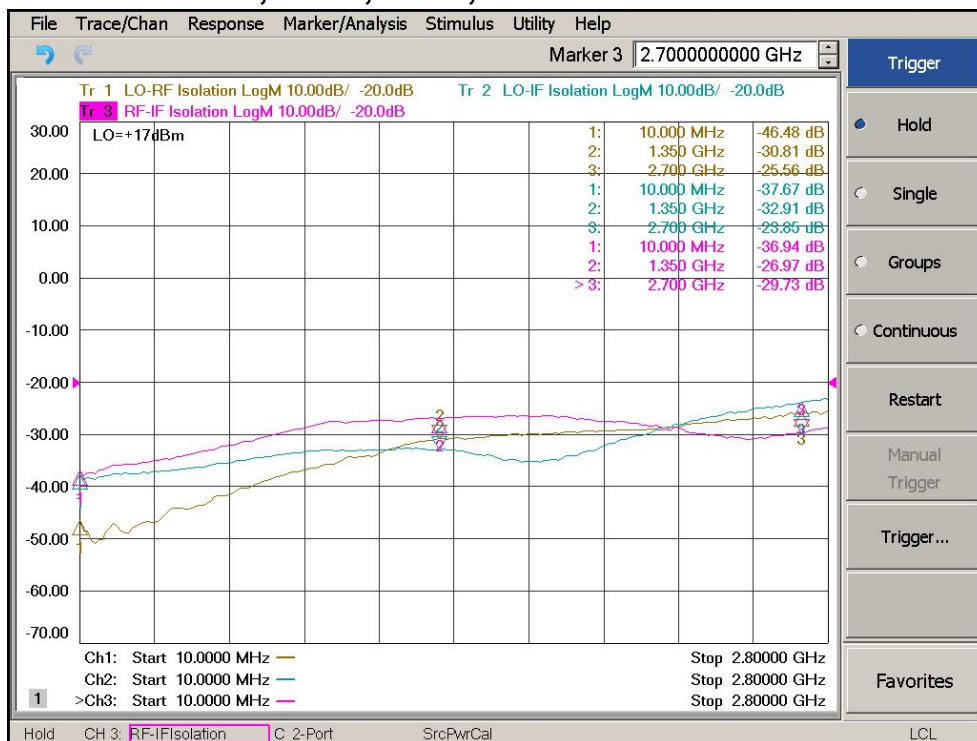
## Level 17

## 1-2700MHz Frequency Mixer

### Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, IF=100MHz



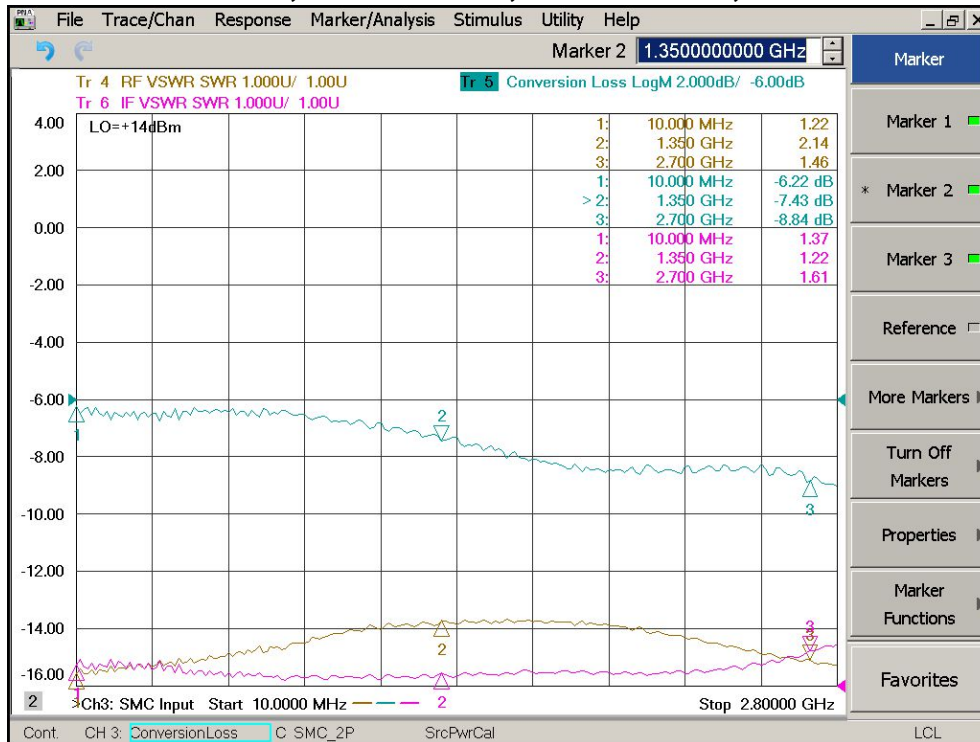
### Isolation LO-RF, LO-IF, RF-IF, LO=+17dBm



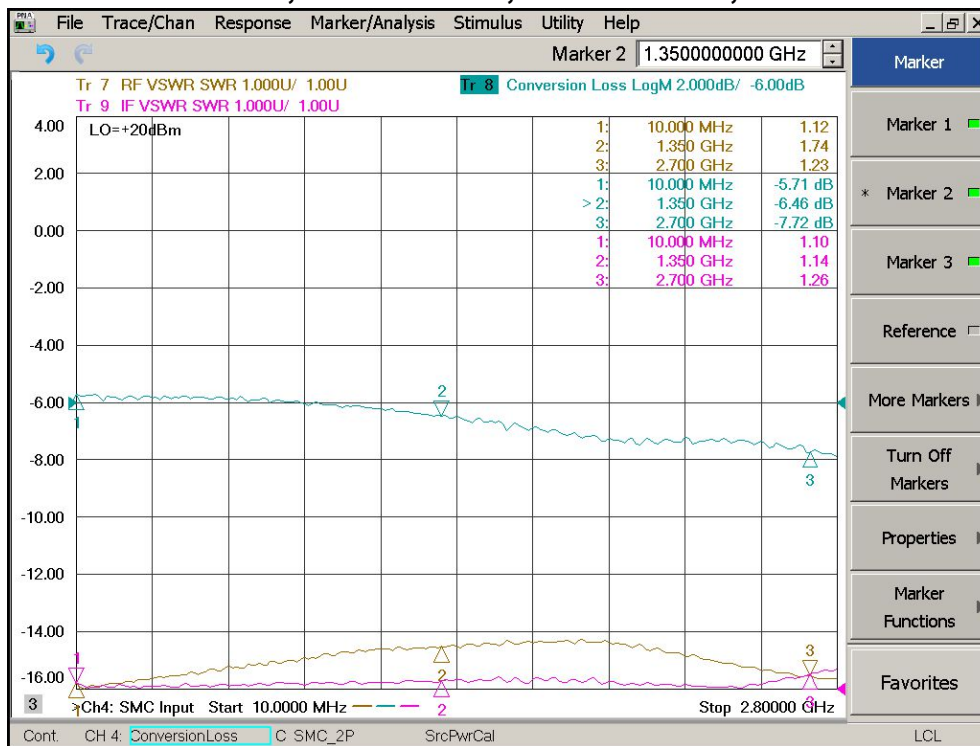
**Level 17**

**1-2700MHz Frequency Mixer**

**Conversion Loss, RF/IF VSWR, LO=+14dBm, IF=100MHz**



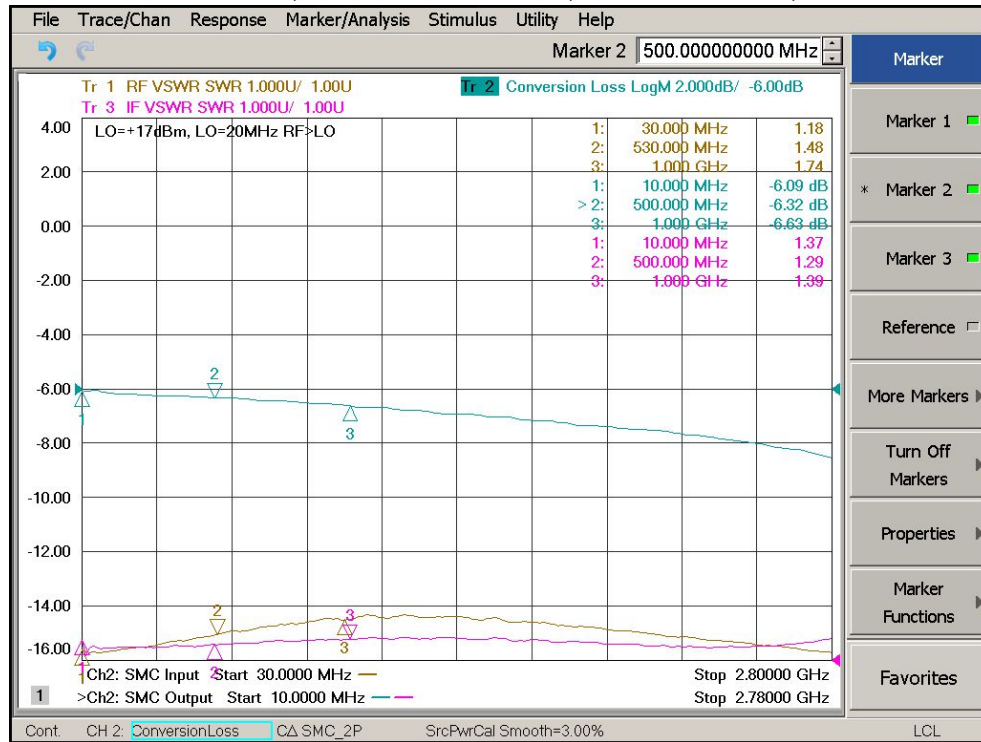
**Conversion Loss, RF/IF VSWR, LO=+20dBm, IF=100MHz**



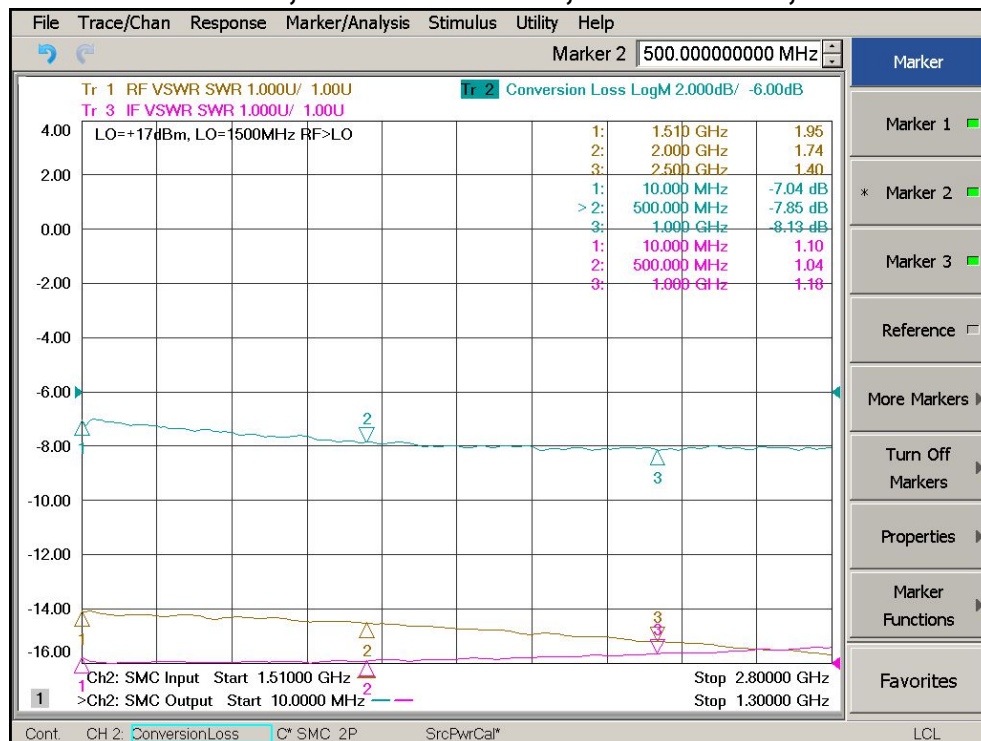
**Level 17**

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**Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, LO=20MHz**



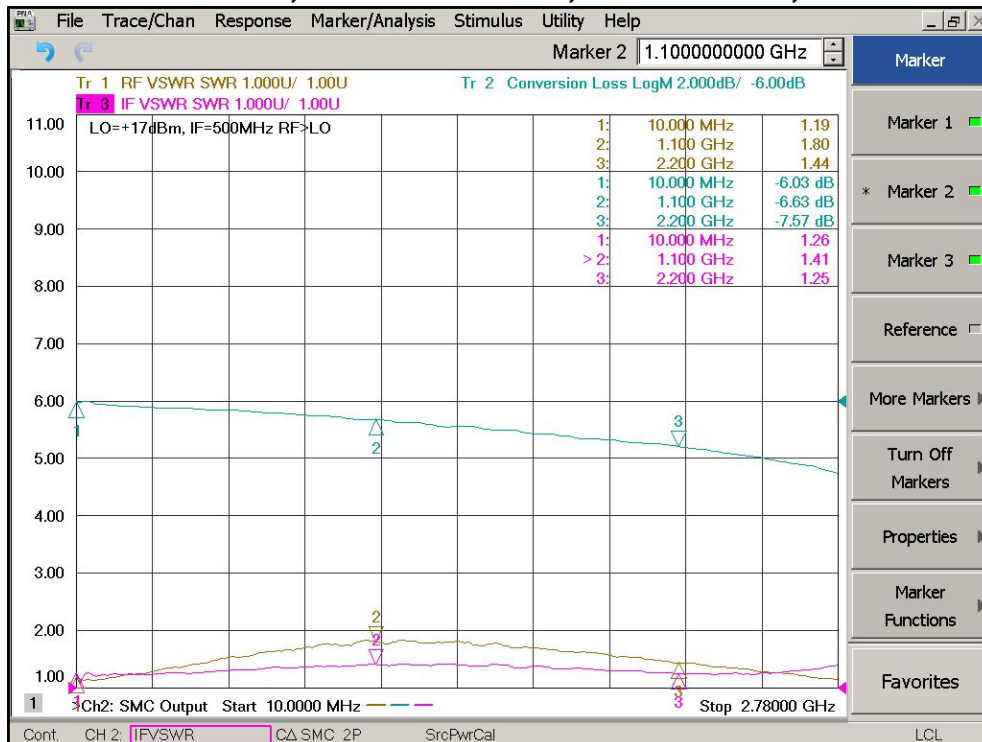
**Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, LO=1500MHz**



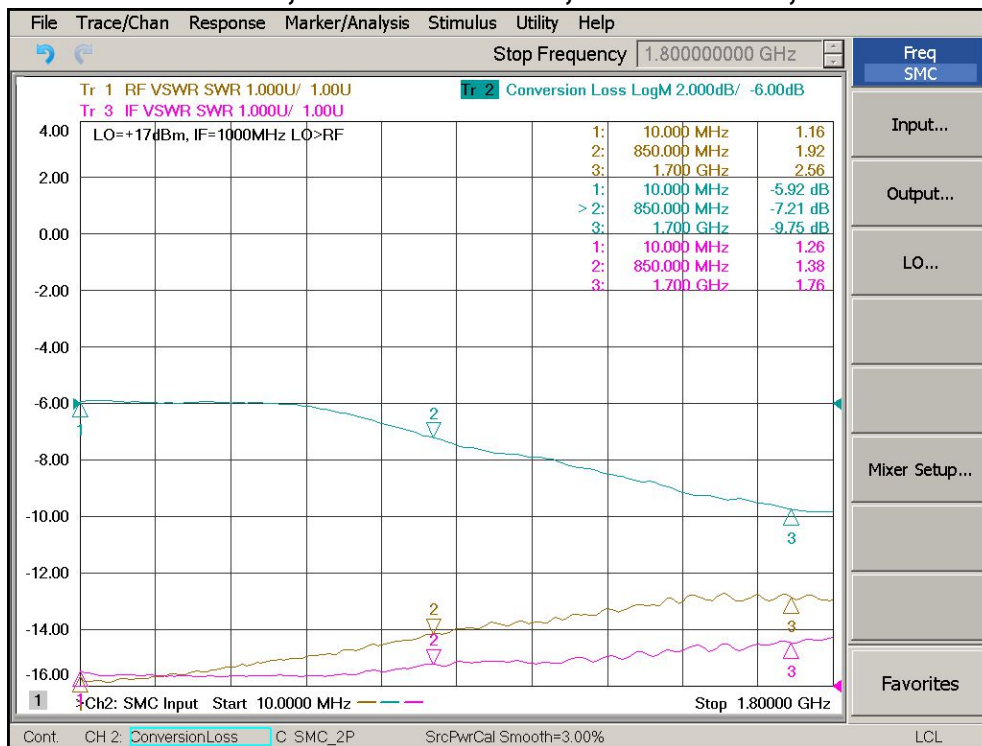
## Level 17

## 1-2700MHz Frequency Mixer

### Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, IF=500MHz



### Conversion Loss, RF/IF/LO VSWR, LO=+17dBm, IF=1000MHz





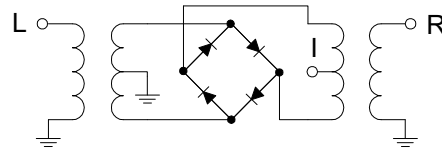
**Level 17**

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**Absolute Maximum Ratings**

Parameter	Absolute Maximum
RF/LO Input Power	+23dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-60 °C to +100 °C

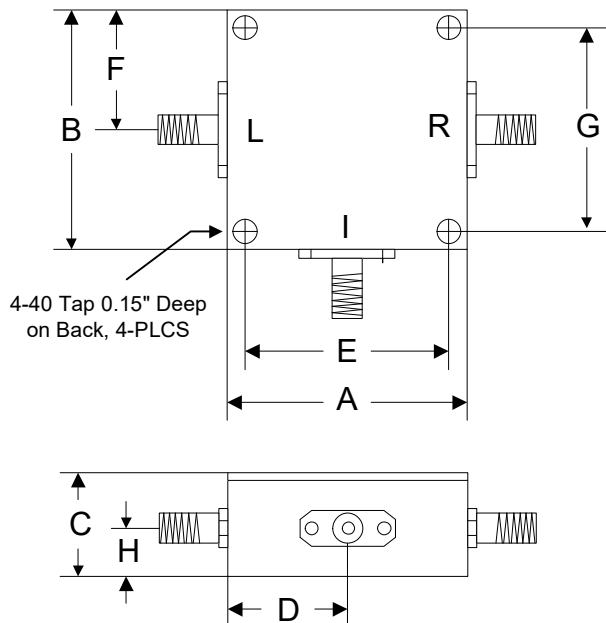
**Schematic**



**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