

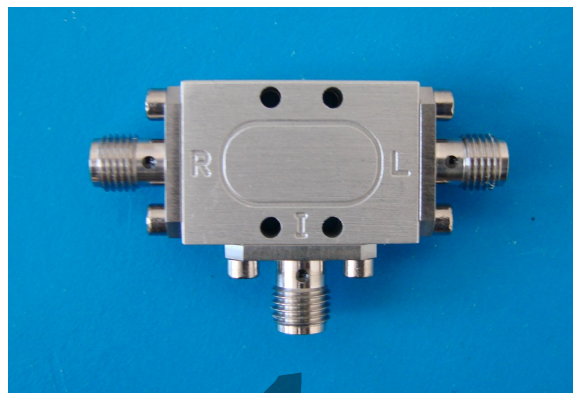
Level 13

2.25-18GHz Frequency Mixer

Features

- LO/RF: 2.25–18GHz
- IF: DC–3GHz
- LO Level: +13dBm
- Conversion Loss: 11dB typ.
- RF Input: Up to +10dBm
- Input IP3: +20dBm
- SMA Female All Ports

Picture



Description

GXR-1 is a passive double balanced mixer with 2.25 to 18GHz at RF/LO port and DC to 3GHz at IF port. The mixer operates with LO drive level range from +10dBm to +16dBm.

Electrical Specifications @ +25 °C, IF=100MHz, LO=+13dBm, 50 Ω

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range LO/RF	GHz	2.25		18
IF	GHz	DC		3
Conversion Loss	dB		11	13
LO-RF Isolation	dB	20	35	
LO-IF Isolation	dB	10	20	
RF-IF Isolation	dB	8	12	
RF VSWR			3.5:1	4.5:1
IF VSWR			2.0:1	3.0:1
LO VSWR			2.5:1	5.0:1
RF Input P _{1dB}	dBm	+8	+10	
Input IP3 (center band)	dBm	+18	+20	

Unless otherwise noted, all measurements performed as a downconverter.

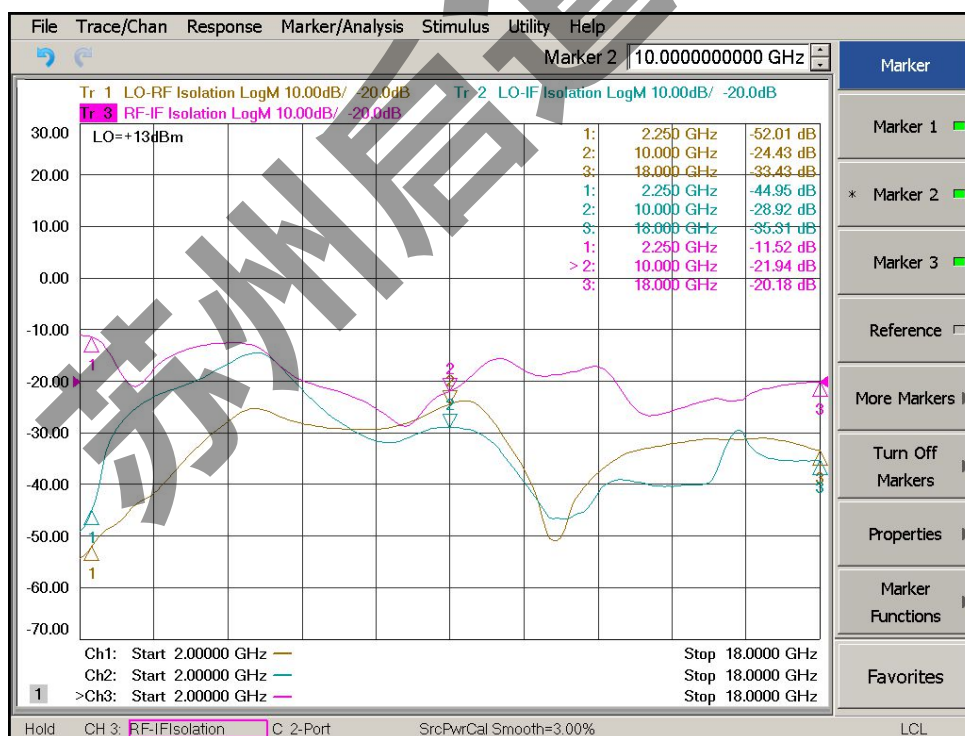
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Conversion Loss, RF/IF VSWR, LO=+13dBm, IF=100MHz



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



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Conversion Loss, RF/IF VSWR, LO=+10dBm, IF=100MHz



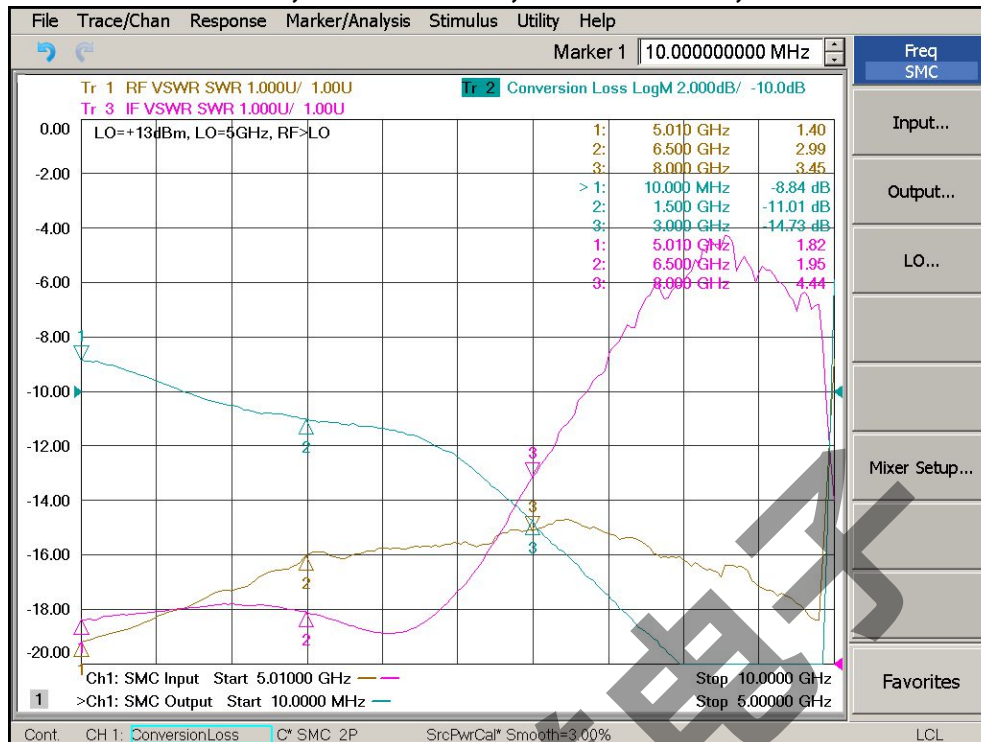
Conversion Loss, RF/IF VSWR, LO=+16dBm, IF=100MHz



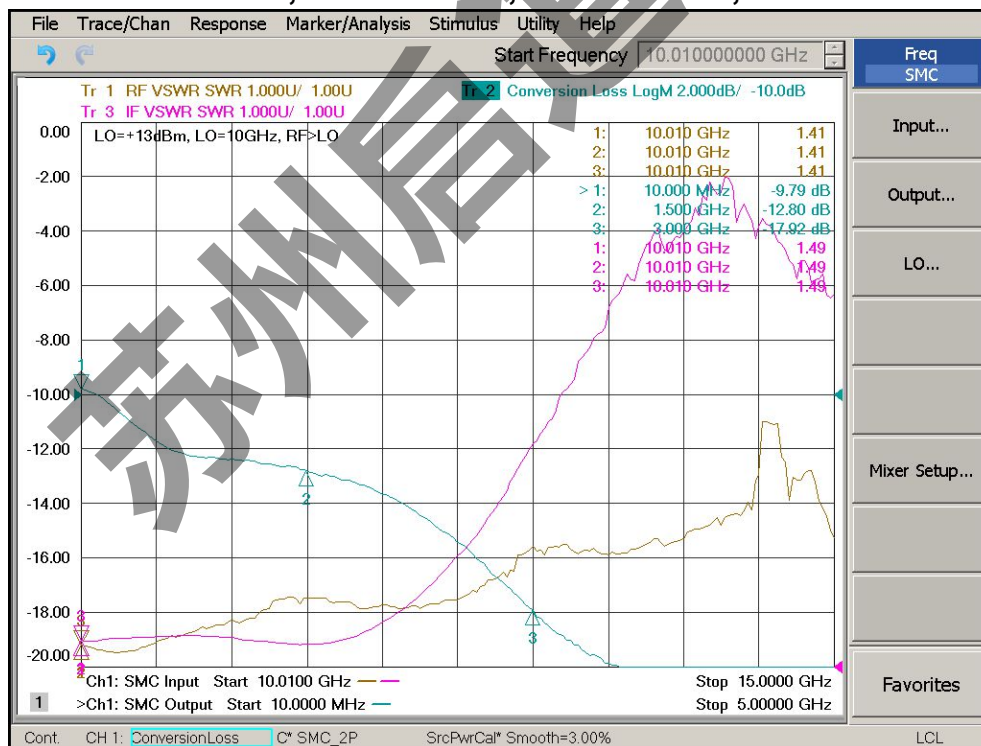
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Conversion Loss, RF/IF VSWR, LO=+13dBm, LO=5GHz



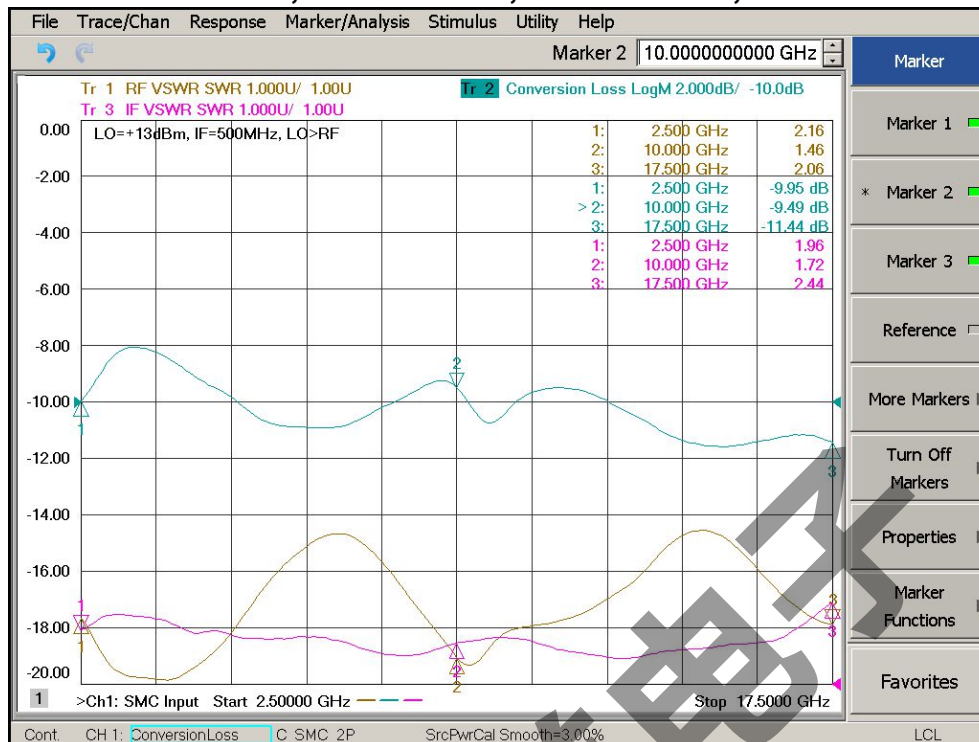
Conversion Loss, RF/IF VSWR, LO=+13dBm, LO=10GHz



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



Conversion Loss, RF/IF VSWR, LO=+13dBm, IF=2500MHz



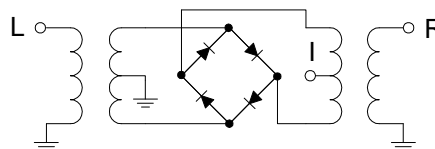
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF/IF Power	+15.5dBm
LO Driver	+20dBm
Operating Temperature	-55 °C to +85 °C
Storage Temperature	-65 °C to +150 °C

Schematic



ESD Sensitive Material



Outline

