

Level 13

6-26GHz Frequency Mixer

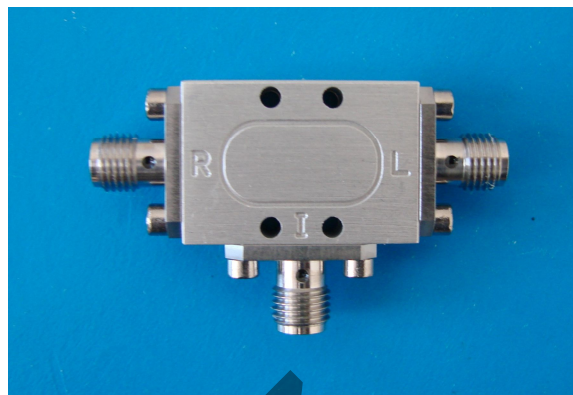
Features

- LO/RF: 6–26GHz
- IF: DC–8GHz
- LO Level: +13dBm
- Conversion Loss: 10dB typ.
- RF Input: Up to +11dBm
- Input IP3: +22dBm
- SMA Female All Ports

Description

GXR-4 is a passive double balanced mixer with 6 to 26GHz at RF/LO port and DC to 8GHz at IF port. The mixer operates with LO drive level +13dBm.

Picture



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

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range LO/RF	GHz	6		26
IF	GHz	DC		8
Conversion Loss	dB		10	12
LO-RF Isolation	dB	25	37	
LO-IF Isolation	dB	18	37	
RF-IF Isolation	dB	5	11	
RF VSWR			2.5:1	4.0:1
IF VSWR			2.0:1	3.5:1
LO VSWR			1.5:1	2.5:1
RF Input P _{1dB} (center band)	dBm	+9	+11	
Input IP3 (center band)	dBm	+18	+22	
Input IP2 (center band)	dBm	+40	+45	

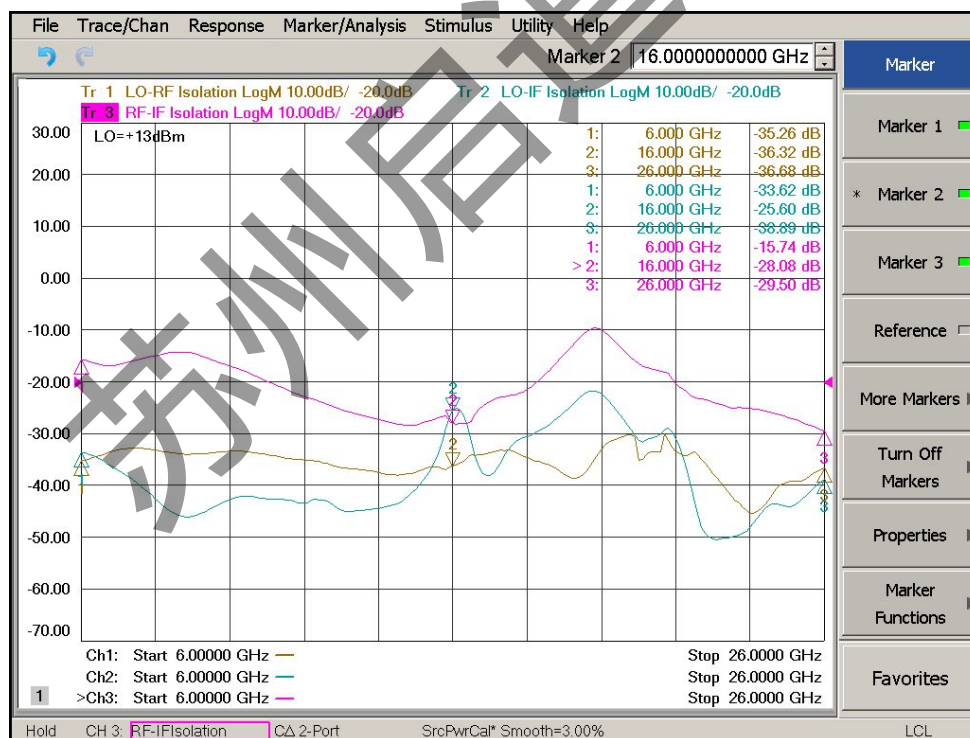
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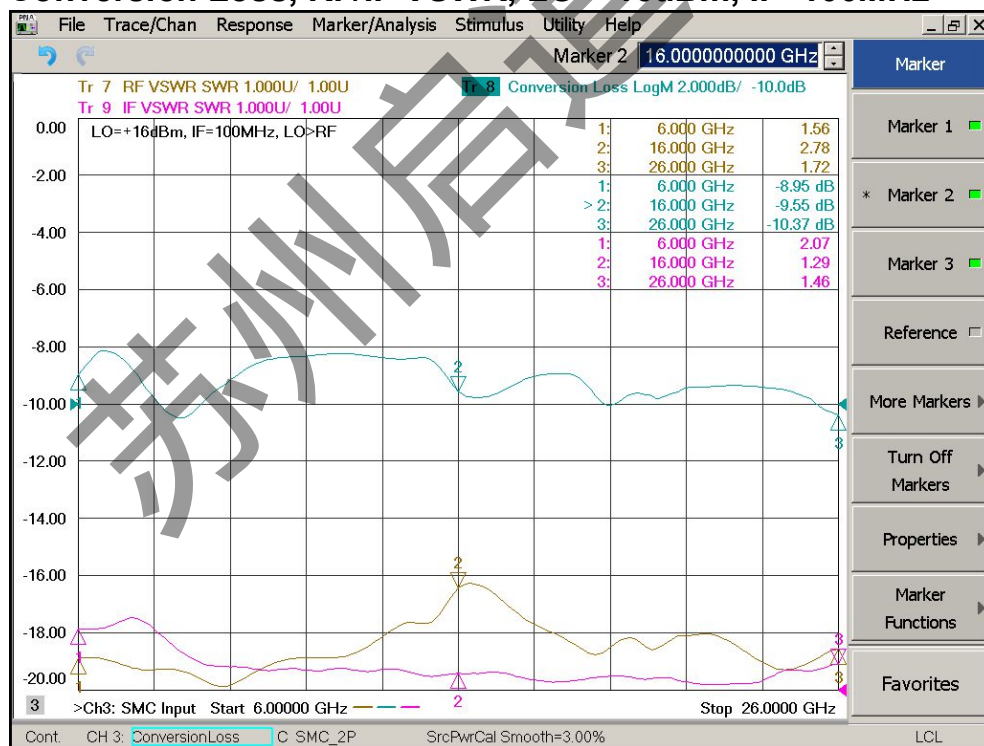
Conversion Loss, RF/IF VSWR, LO=+13dBm, IF=100MHz



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



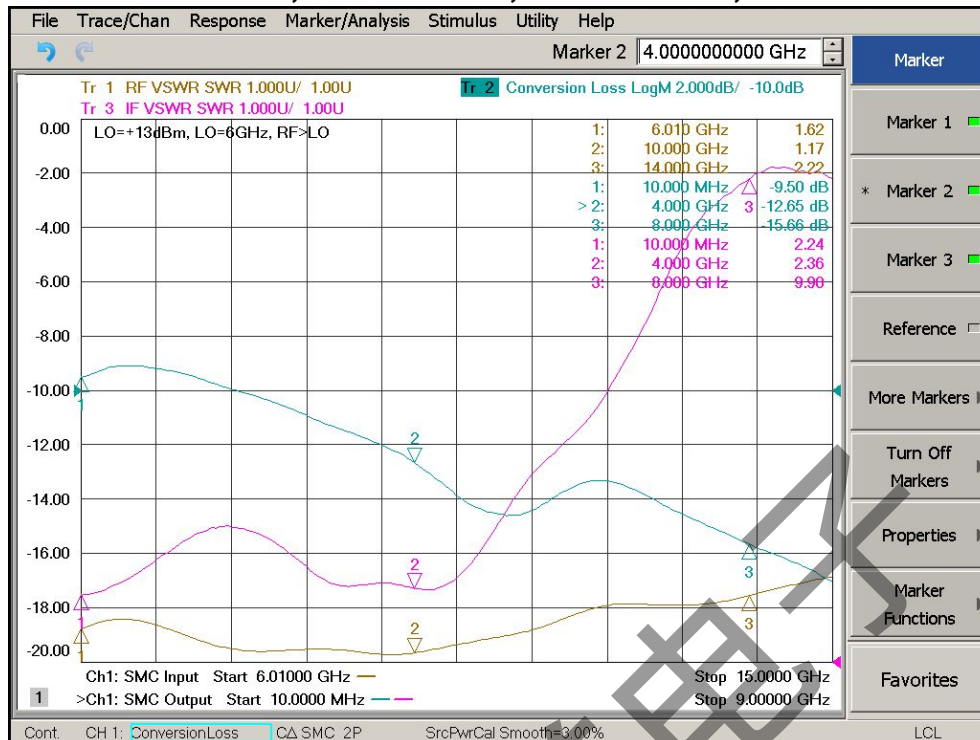
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Conversion Loss, RF/IF VSWR, LO=+10dBm, IF=100MHz

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


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Conversion Loss, RF/IF VSWR, LO=+13dBm, LO=6GHz



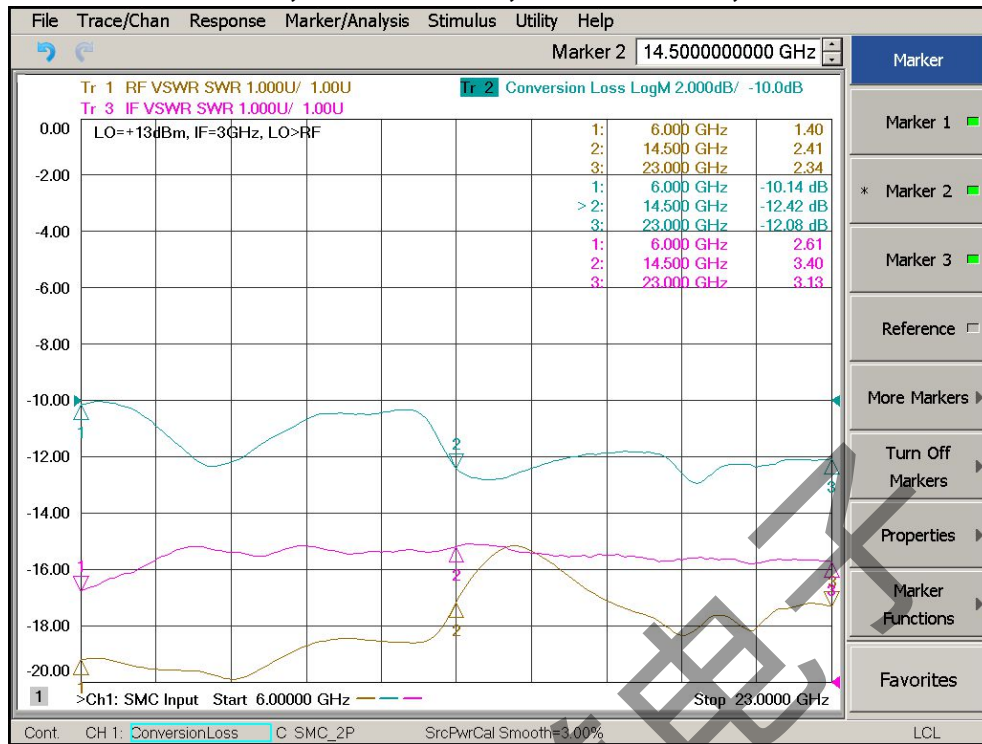
Conversion Loss, RF/IF VSWR, LO=+13dBm, LO=15GHz



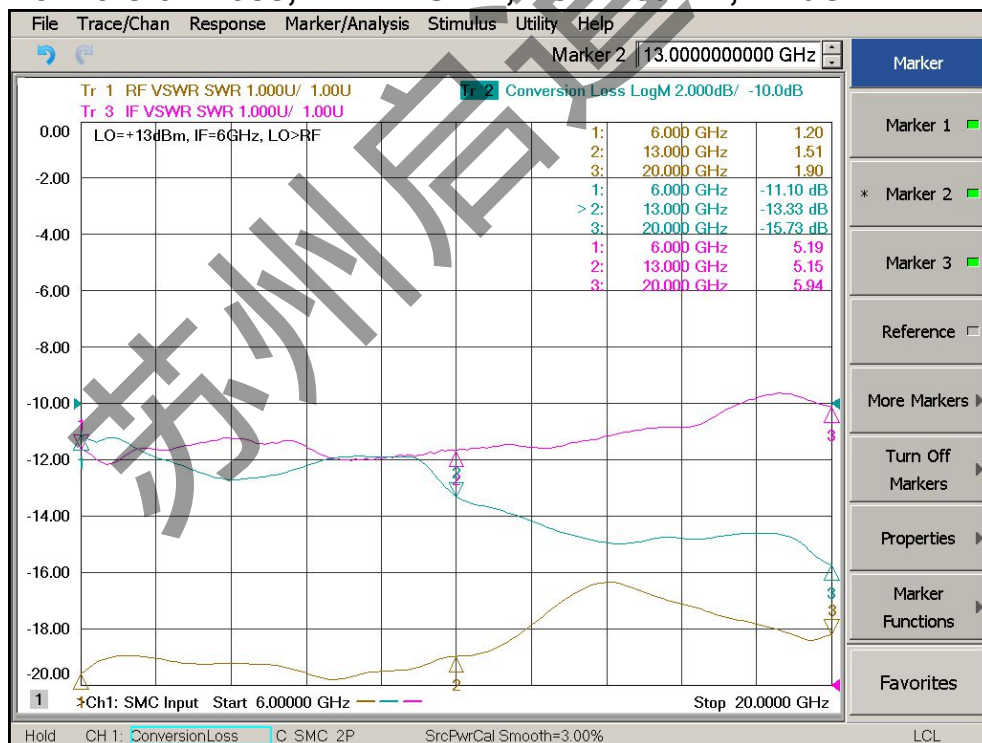
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Conversion Loss, RF/IF VSWR, LO=+13dBm, IF=3GHz



Conversion Loss, RF/IF VSWR, LO=+13dBm, IF=6GHz

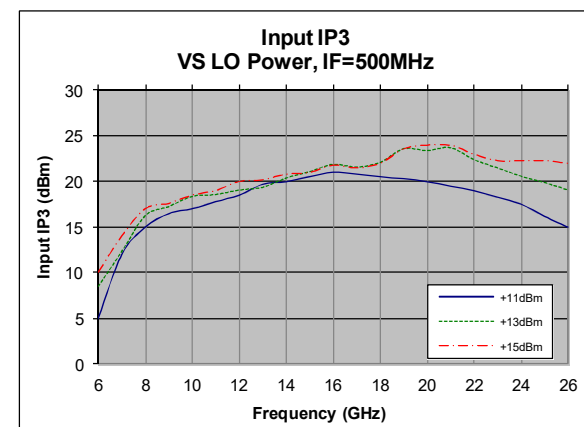
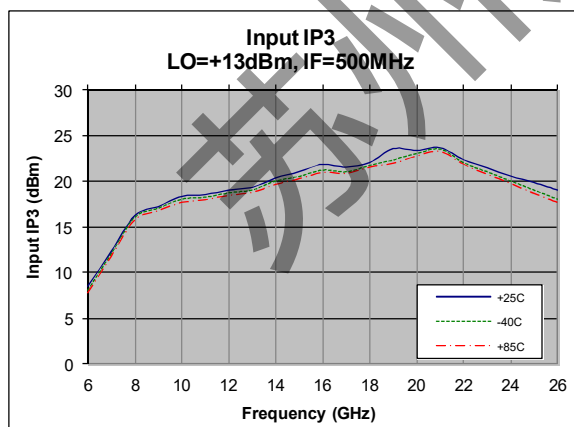
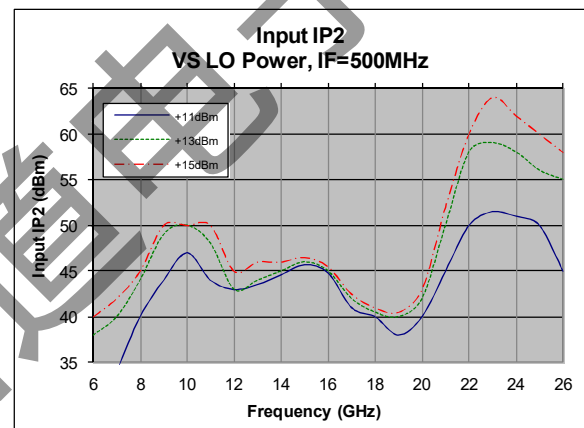
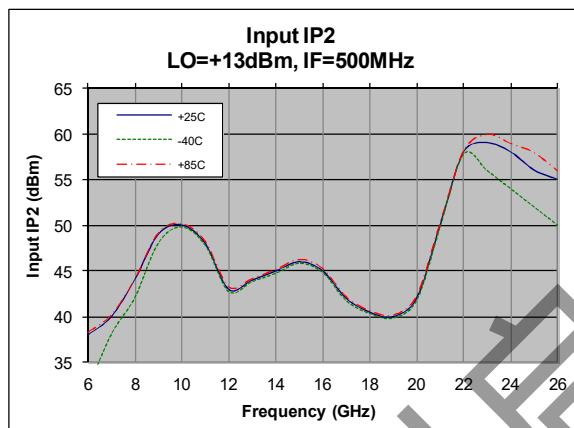
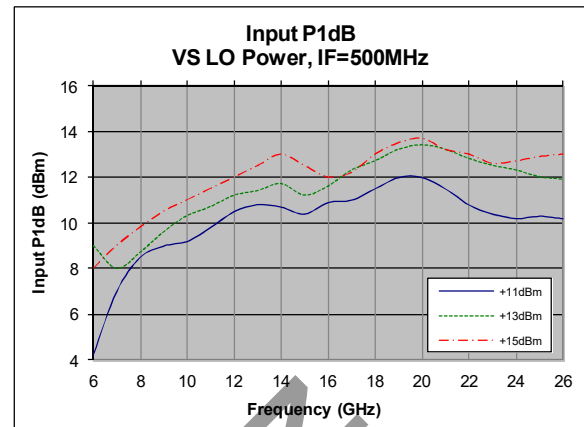
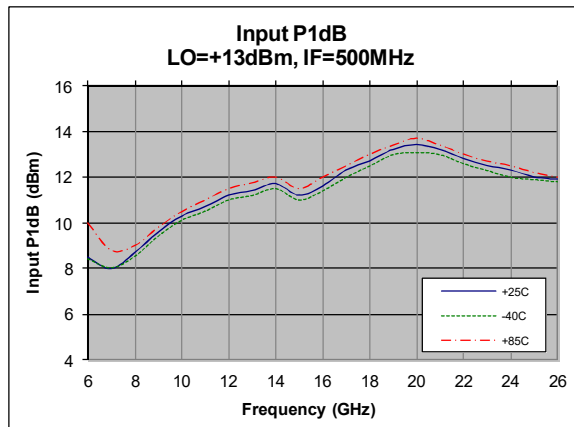




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Typical Performance



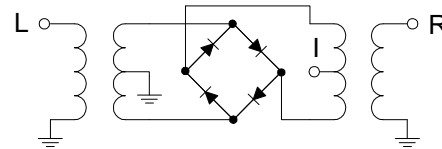
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF IF Power	+21dBm
LO Driver	+21dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-65 °C to +150 °C

Schematic



ESD Sensitive Material



Outline

