

## Level 13

## 6-14GHz Frequency Mixer

### Features

- LO/RF: 6–14GHz
- IF: DC–5GHz
- LO Level: +13dBm
- Conversion Loss: 6.5dB typ.
- RF Input: Up to +9.5dBm
- Input IP3: +16dBm
- SMA Female All Ports

### Picture



### Description

GXR-17 is a passive double balanced mixer with 6 to 14GHz at RF/LO port and DC to 5GHz at IF port. The mixer operates with LO drive level range from +9dBm to +16dBm.

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

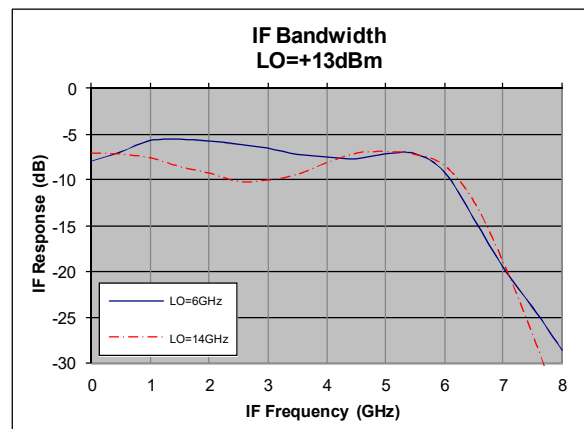
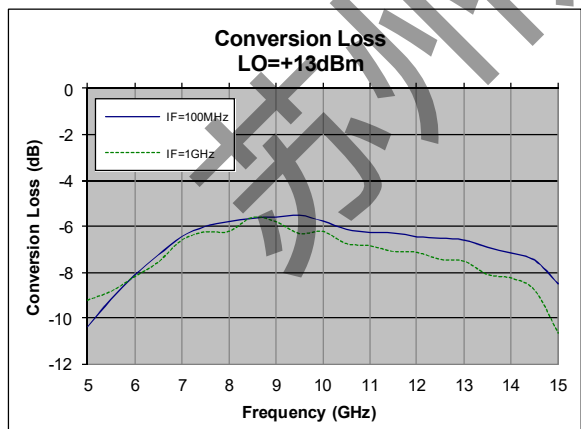
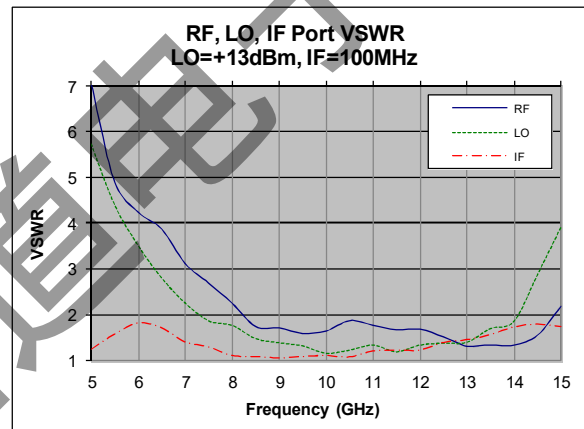
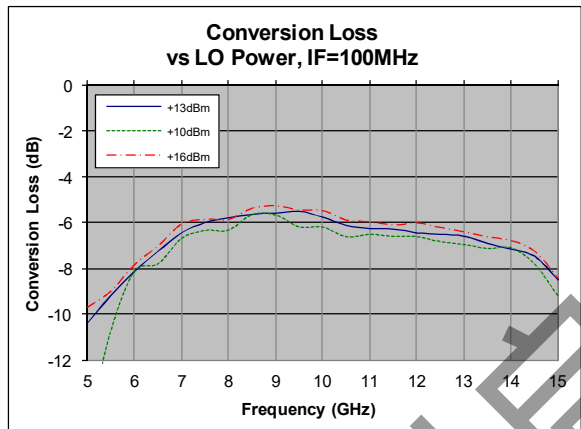
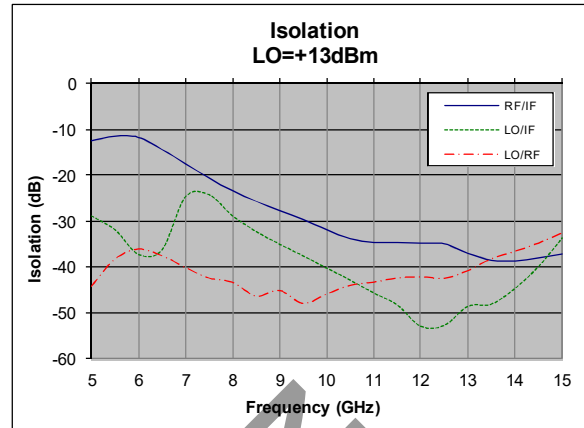
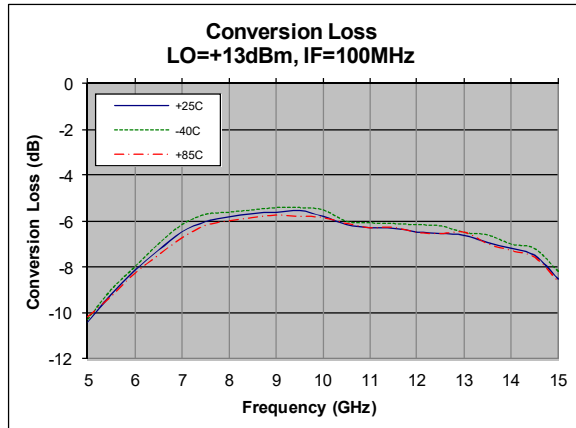
Parameter		Unit	Minimum	Typical	Maximum
Frequency Range	LO/RF	GHz	6		14
	IF	GHz	DC		5
Conversion Loss	LO/RF: 8-12GHz	dB		6.5	8
	LO/RF: 6-14GHz	dB		7	10
LO-RF Isolation	LO/RF: 8-12GHz	dB	37	43	
	LO/RF: 6-14GHz	dB	34	43	
LO-IF Isolation	LO/RF: 8-12GHz	dB	28	37	
	LO/RF: 6-14GHz	dB	28	37	
RF-IF Isolation	LO/RF: 8-12GHz	dB	15	22	
	LO/RF: 6-14GHz	dB	10	22	
RF Input P <sub>1dB</sub>	LO/RF: 8-12GHz	dBm		+9.5	
	LO/RF: 6-14GHz	dBm		+9.5	
Input IP3	LO/RF: 8-12GHz	dBm		+16	
	LO/RF: 6-14GHz	dBm		+16	

Unless otherwise noted, all measurements performed as a downconverter.

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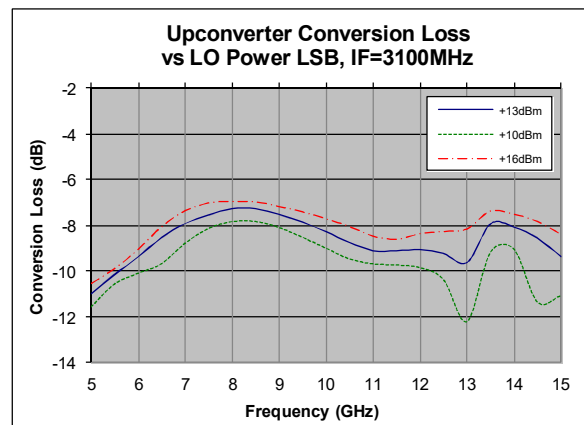
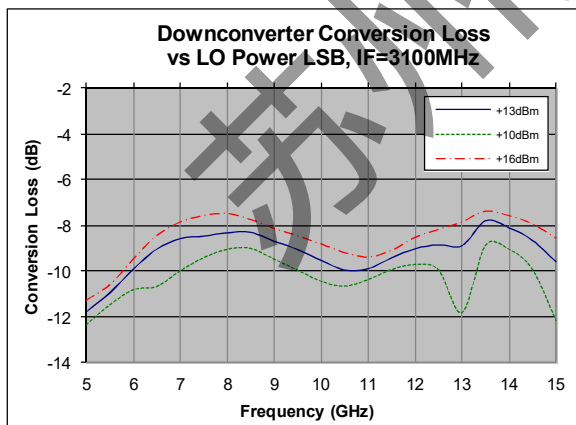
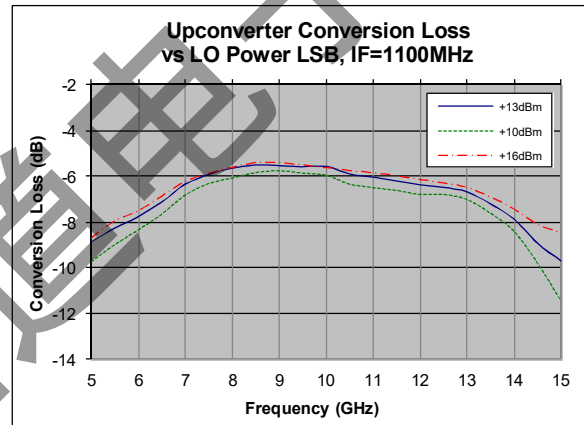
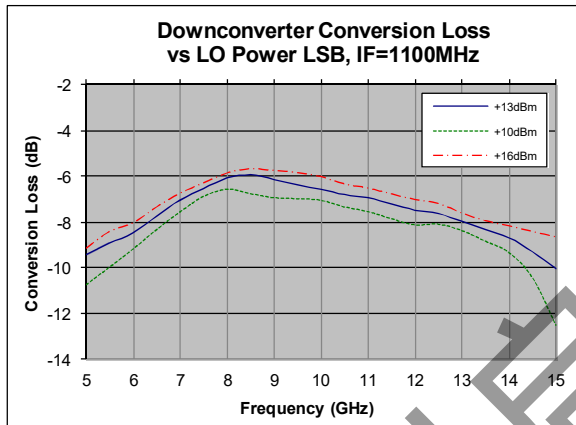
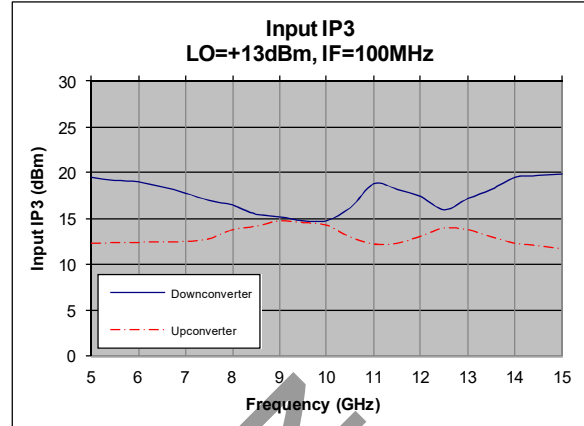
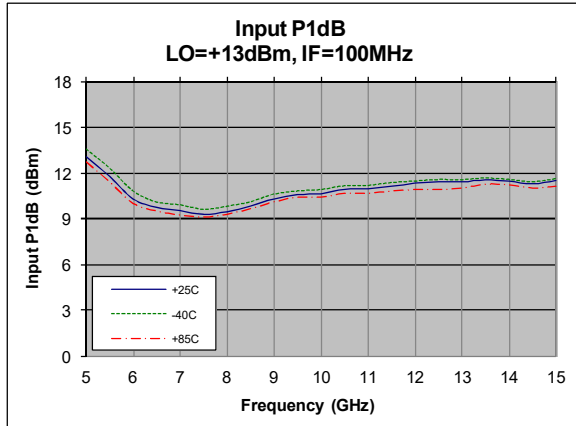
Typical Performance



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**Typical Performance**



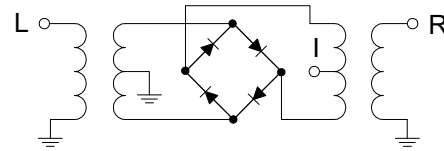
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**Absolute Maximum Ratings**

Parameter	Absolute Maximum
RF Power	+25dBm
LO Driver	+25dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-65 °C to +150 °C

**Schematic**



**Outline**

