

Level 13

11-21GHz Frequency Mixer

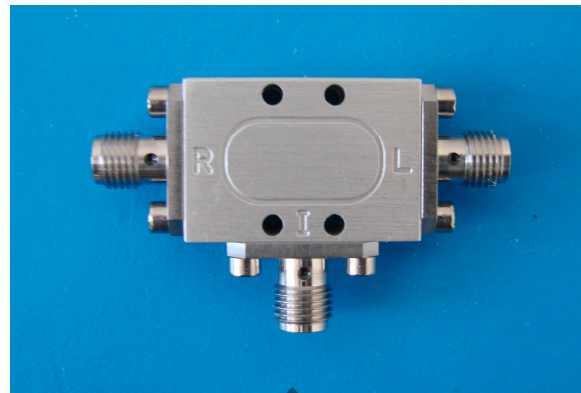
Features

- LO/RF: 11–21GHz
- IF: DC–6GHz
- LO Level: +13dBm
- Conversion Loss: 6dB typ.
- RF Input: Up to +9dBm
- Input IP3: +16dBm
- SMA Female All Ports

Description

GXR-18 is a passive double balanced mixer with 11 to 21GHz at RF/LO port and DC to 6GHz at IF port. The mixer operates with LO drive level range from +9dBm to +16dBm.

Picture



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

Parameter		Unit	Minimum	Typical	Maximum
Frequency Range	LO/RF	GHz	11		21
	IF	GHz	DC		6
Conversion Loss	LO/RF: 13-17GHz	dB		6	8
	LO/RF: 11-21GHz	dB		7	10
LO-RF Isolation	LO/RF: 13-17GHz	dB	35	43	
	LO/RF: 11-21GHz	dB	30	43	
LO-IF Isolation	LO/RF: 13-17GHz	dB	24	38	
	LO/RF: 11-21GHz	dB	22	38	
RF-IF Isolation	LO/RF: 13-17GHz	dB	17	25	
	LO/RF: 11-21GHz	dB	15	25	
RF Input P _{1dB}	LO/RF: 13-17GHz	dBm		+9	
	LO/RF: 11-21GHz	dBm		+9	
Input IP3	LO/RF: 13-17GHz	dBm		+16	
	LO/RF: 11-21GHz	dBm		+16	

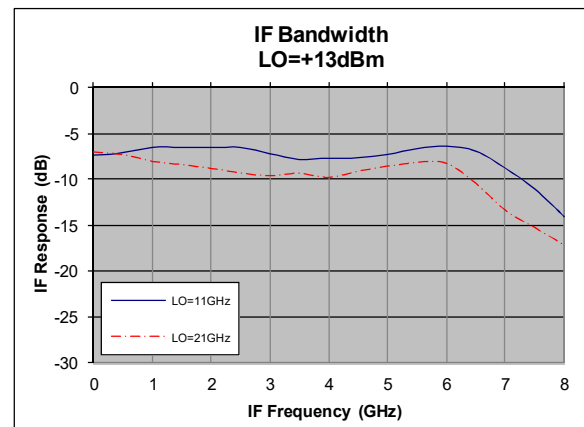
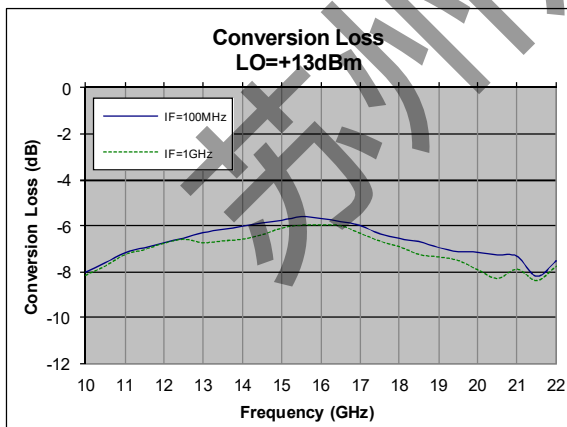
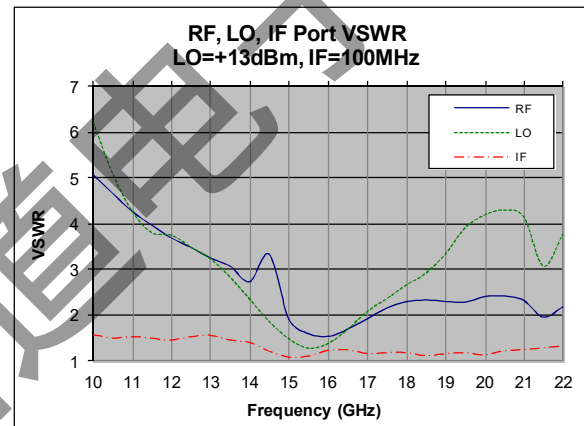
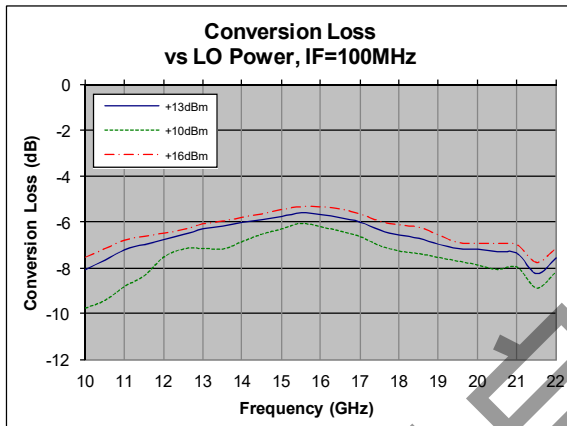
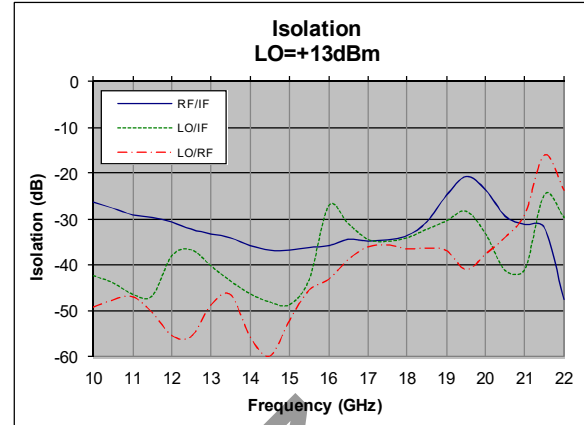
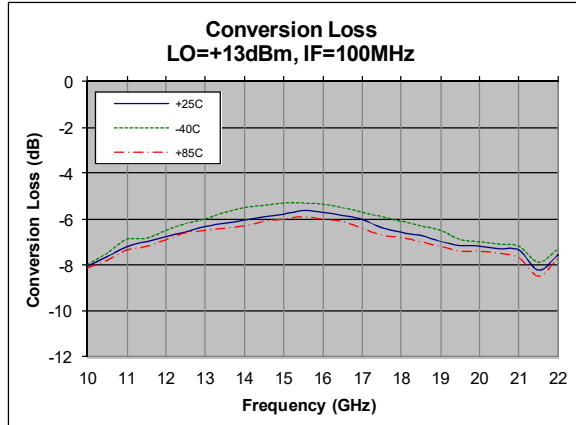
Unless otherwise noted, all measurements performed as a downconverter.



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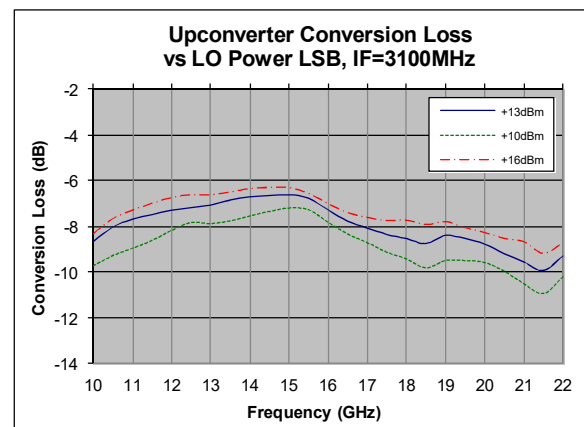
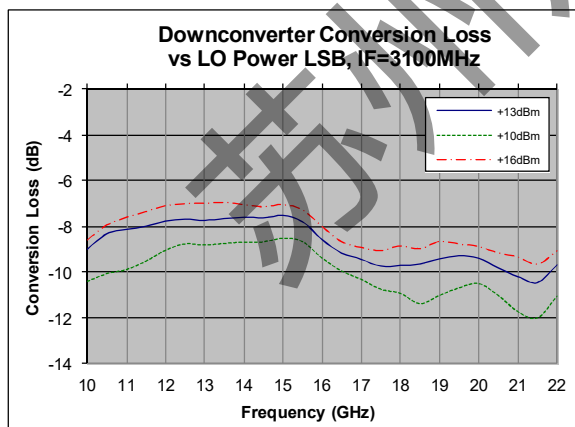
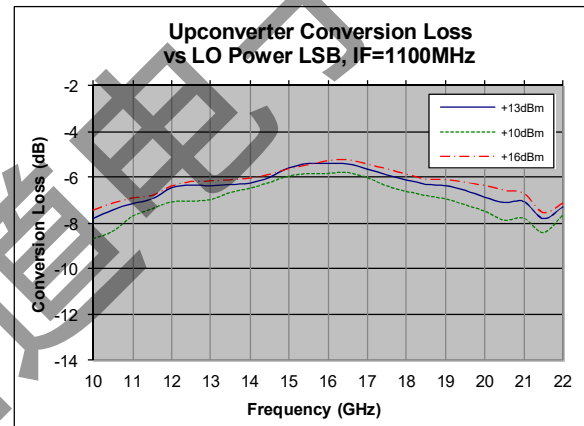
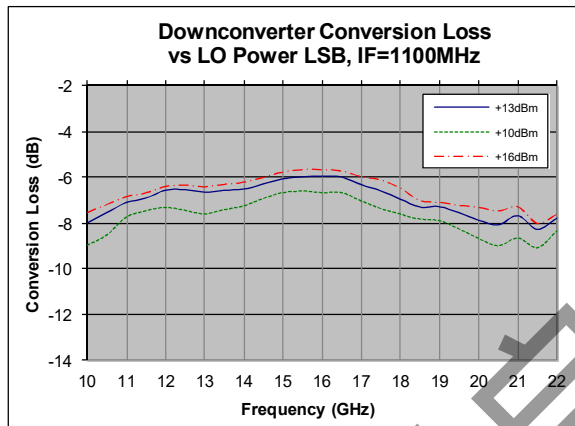
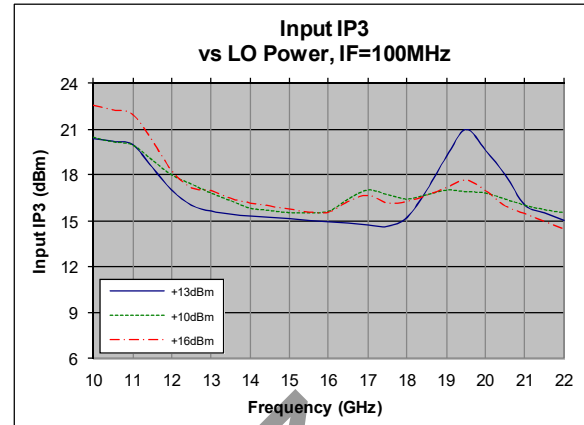
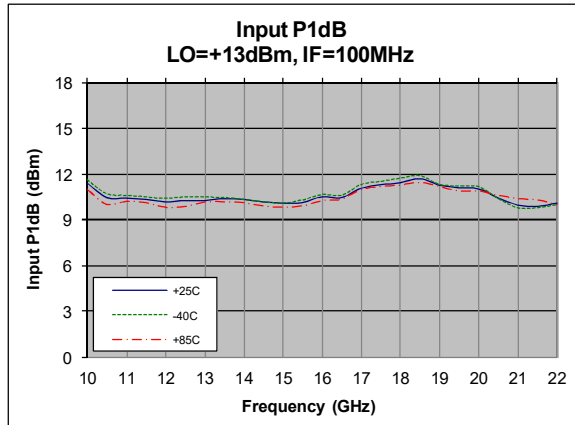
Typical Performance



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Typical Performance



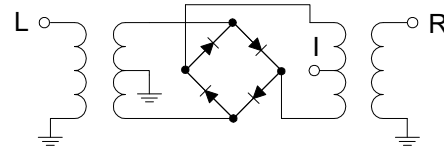
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Absolute Maximum Ratings

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

