

2-18GHz Frequency Mixer

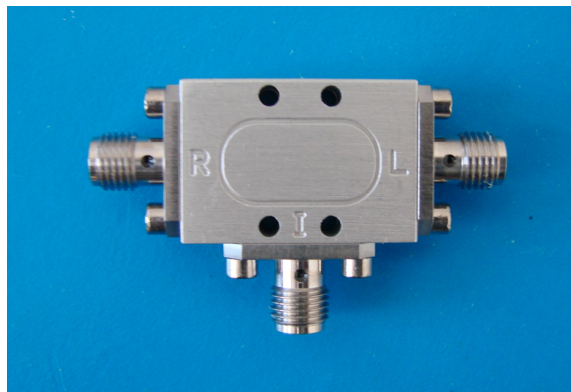
Features

- LO/RF: 2–18GHz
- IF: DC–3GHz
- LO Level: +13dBm
- Conversion Loss: 10dB typ.
- RF Input: Up to +13dBm
- Input IP3: +23dBm
- SMA Female All Ports

Description

HD32507 is a passive double balanced mixer with 2 to 18GHz at RF/LO port and DC to 3GHz at IF port. The mixer operates with LO drive level range from +9dBm to +17dBm.

Picture



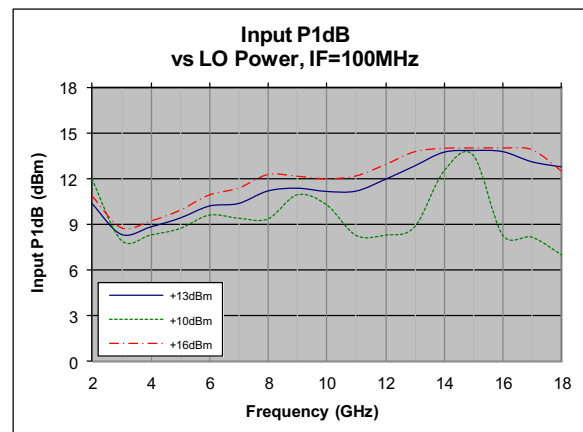
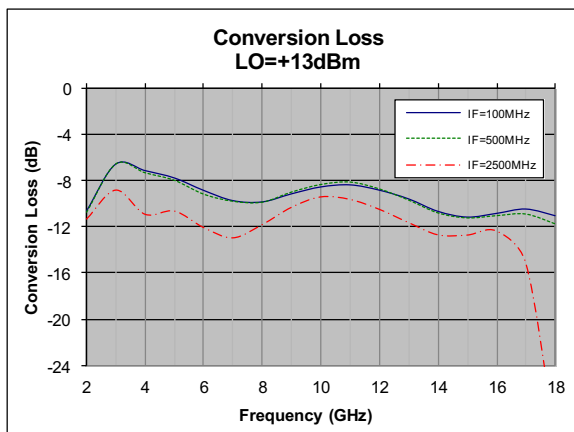
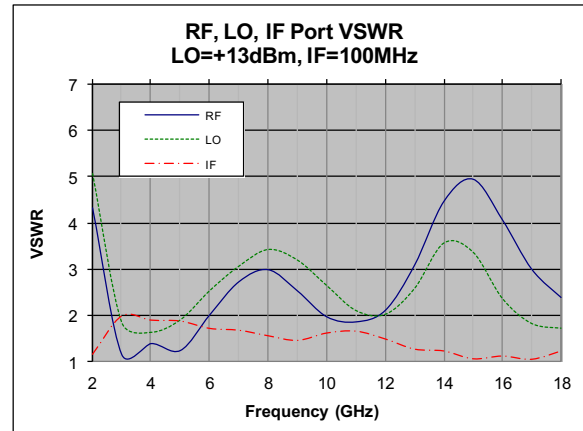
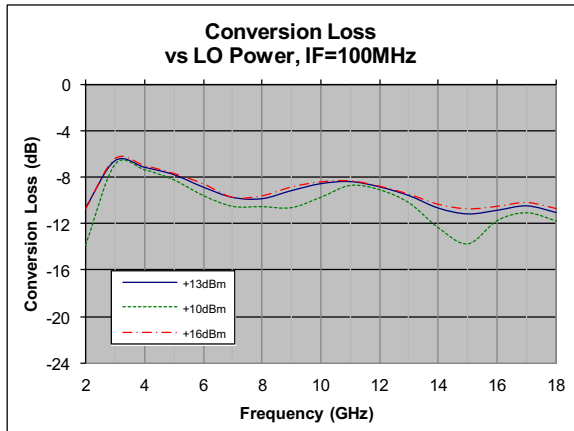
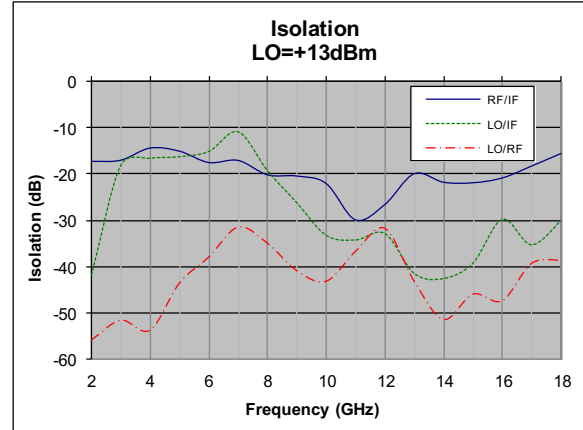
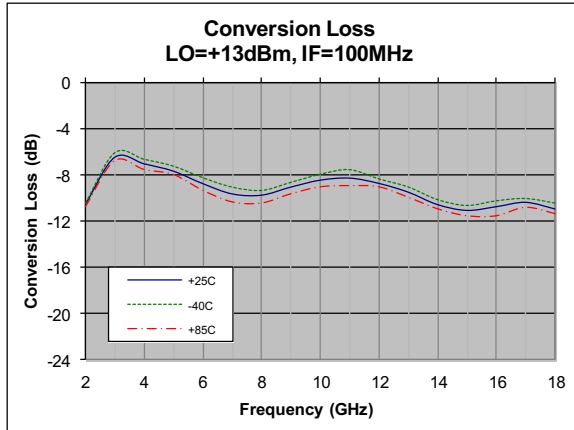
Electrical Specifications @ +25 °C, IF=100MHz, LO=+13dBm, 50 Ω

Parameter		Unit	Minimum	Typical	Maximum
Frequency Range	LO/RF	GHz	2		18
	IF	GHz	DC		3
Conversion Loss	LO/RF: 2-12GHz	dB		9	12
	LO/RF: 12-18GHz	dB		11	13
LO-RF Isolation	LO/RF: 2-12GHz	dB		38	
	LO/RF: 12-18GHz	dB		35	
LO-IF Isolation	LO/RF: 2-12GHz	dB		20	
	LO/RF: 12-18GHz	dB		28	
RF-IF Isolation	LO/RF: 2-12GHz	dB		15	
	LO/RF: 12-18GHz	dB		12	
RF Input P _{1dB}	LO/RF: 2-12GHz	dBm		+10	
	LO/RF: 12-18GHz	dBm		+13	
Input IP3	LO/RF: 2-12GHz	dBm		+20	
	LO/RF: 12-18GHz	dBm		+23	

Unless otherwise noted, all measurements performed as a downconverter.

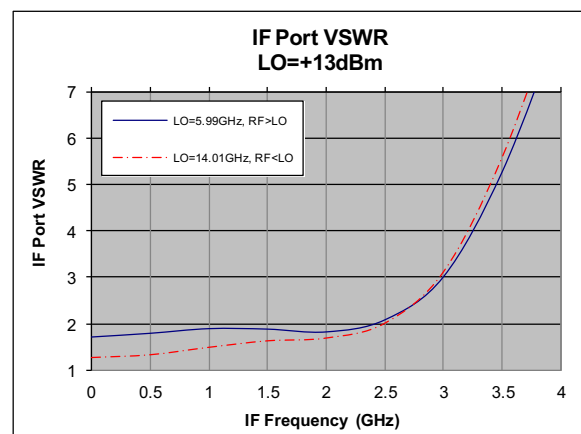
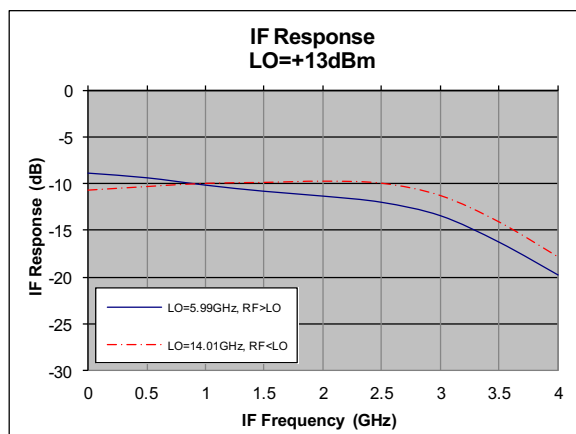
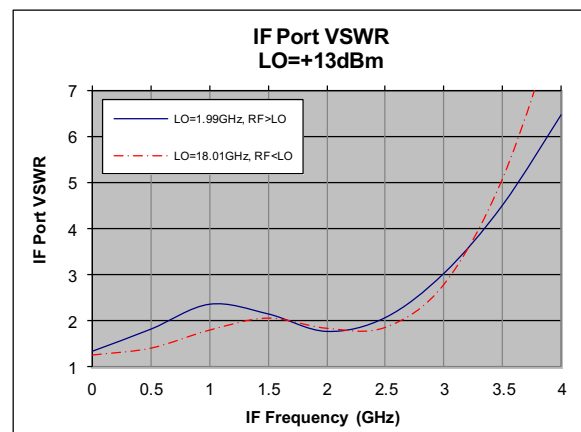
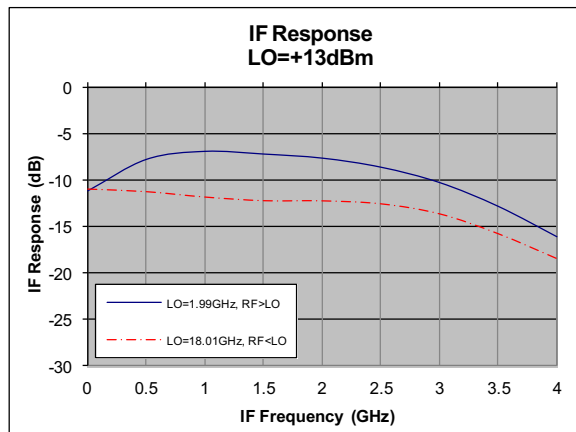
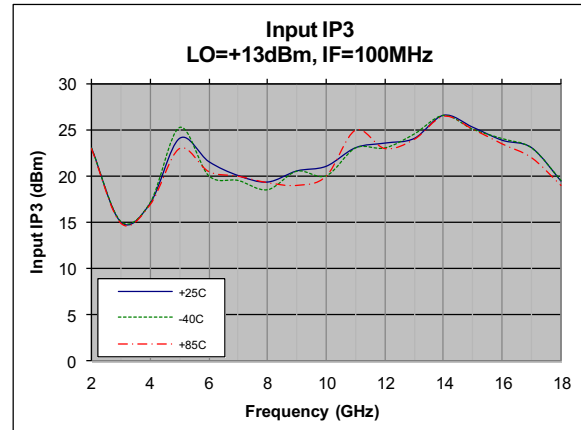
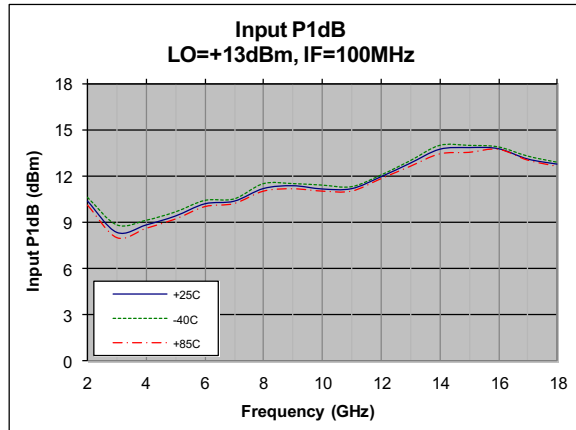
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Typical Performance



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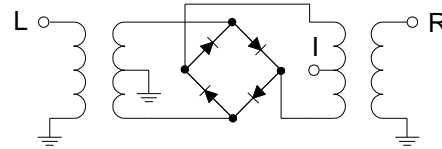


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Absolute Maximum Ratings

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



Outline

