

6-26GHz Frequency Mixer

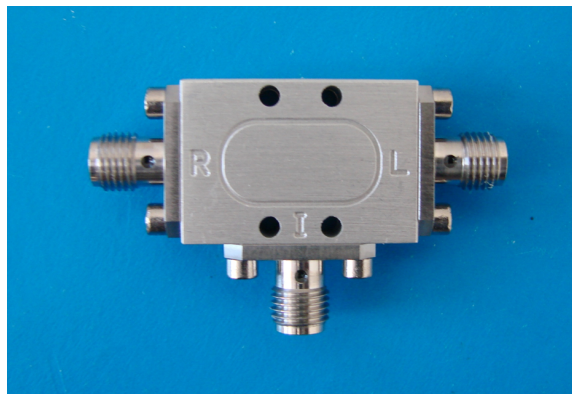
Features

- LO/RF: 6–26GHz
- IF: DC–8GHz
- LO Level: +13dBm
- Conversion Loss: 9dB typ.
- RF Input: Up to +11dBm
- Input IP3: +22dBm
- SMA Female All Ports

Description

HD32510 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

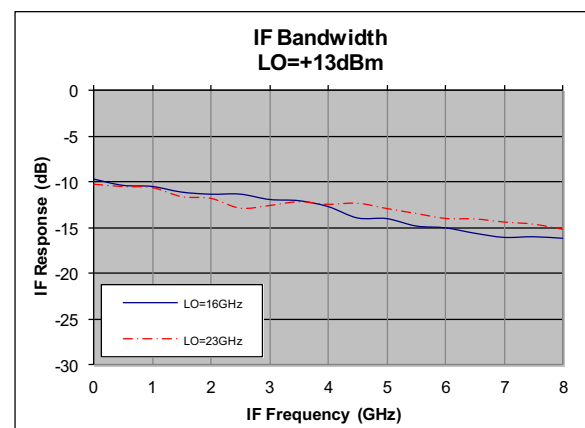
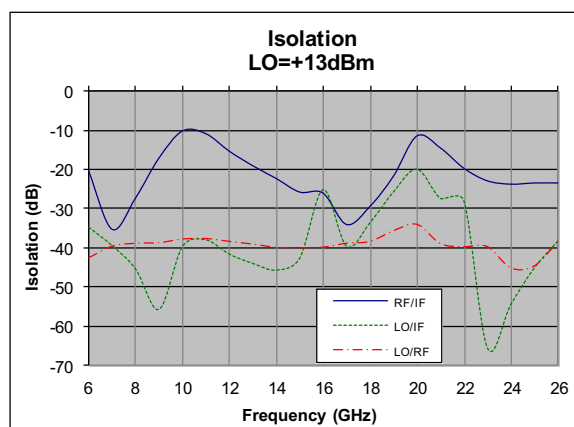
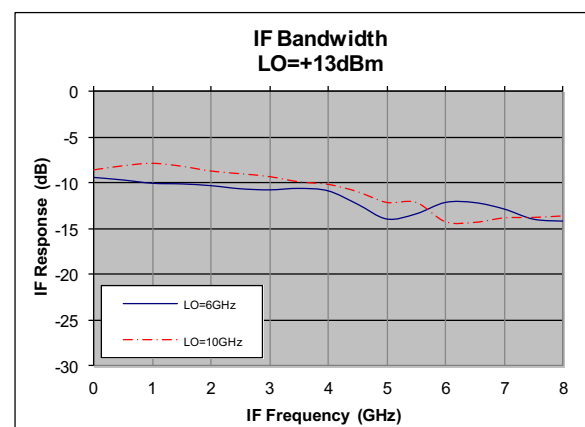
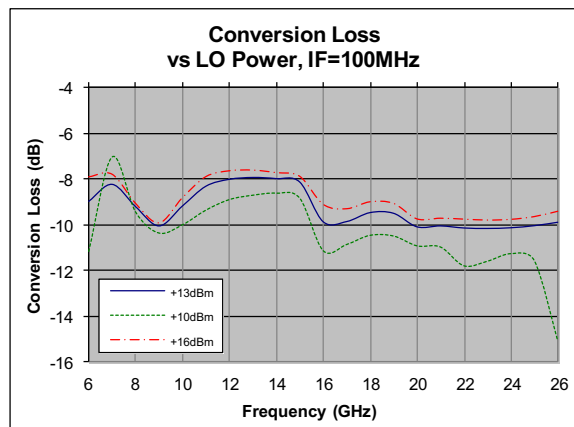
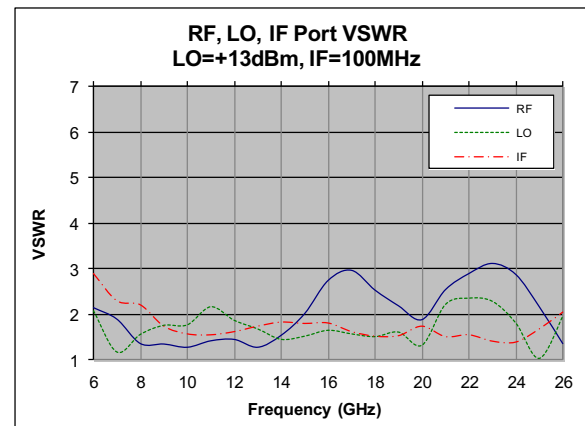
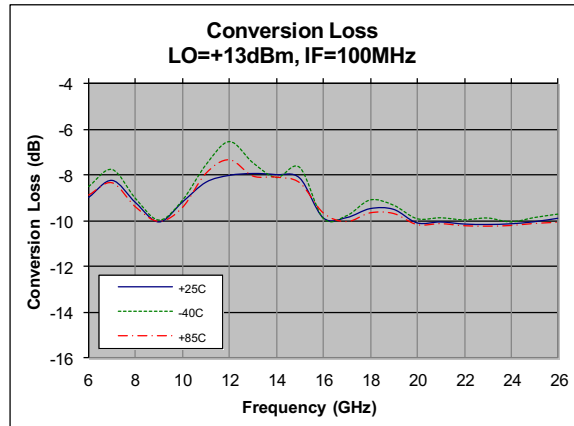


Electrical Specifications @ +25 °C, IF=500MHz, LO=+13dBm, 50 Ω

Parameter		Unit	Minimum	Typical	Maximum
Frequency Range	LO/RF	GHz	6		26
	IF	GHz	DC		8
Conversion Loss	LO/RF: 6-16GHz	dB		9	12
	LO/RF: 16-26GHz	dB		9	11
LO-RF Isolation	LO/RF: 6-16GHz	dB		37	
	LO/RF: 16-26GHz	dB		39	
LO-IF Isolation	LO/RF: 6-16GHz	dB	31	37	
	LO/RF: 16-26GHz	dB	21	32	
RF-IF Isolation	LO/RF: 6-16GHz	dB	5	11	
	LO/RF: 16-26GHz	dB	10	20	
RF Input P _{1dB}	LO/RF: 6-16GHz	dBm		+10	
	LO/RF: 16-26GHz	dBm		+11	
Input IP3	LO/RF: 6-16GHz	dBm		+17	
	LO/RF: 16-26GHz	dBm		+22	
Input IP2	LO/RF: 6-16GHz	dBm		+45	
	LO/RF: 16-26GHz	dBm		+50	

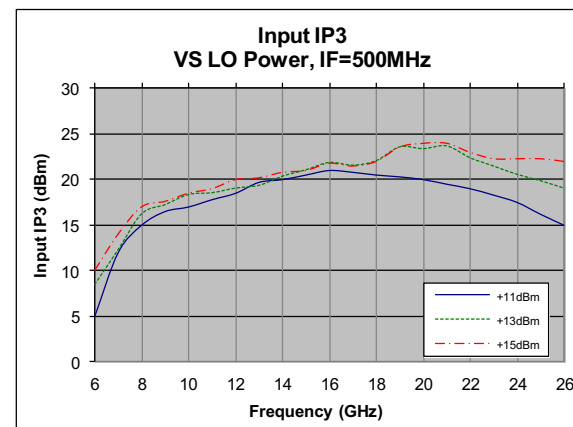
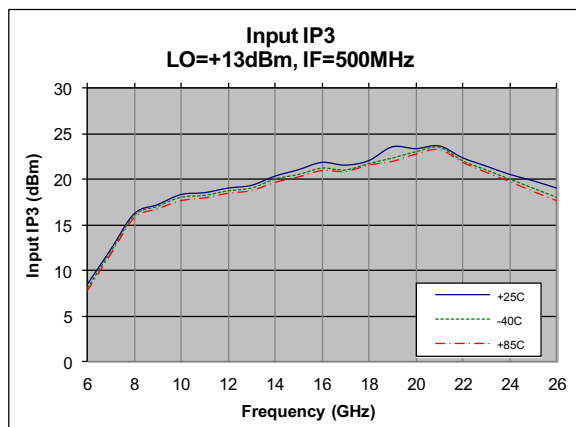
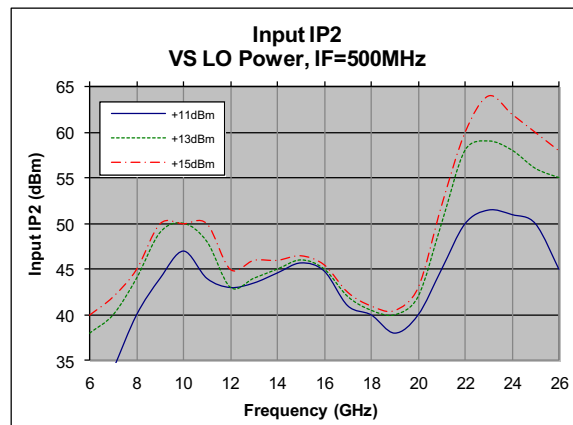
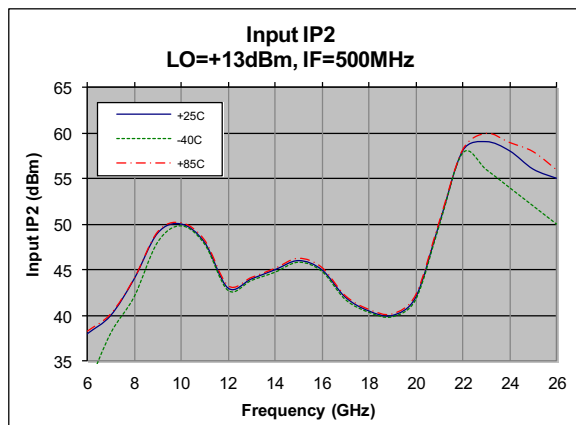
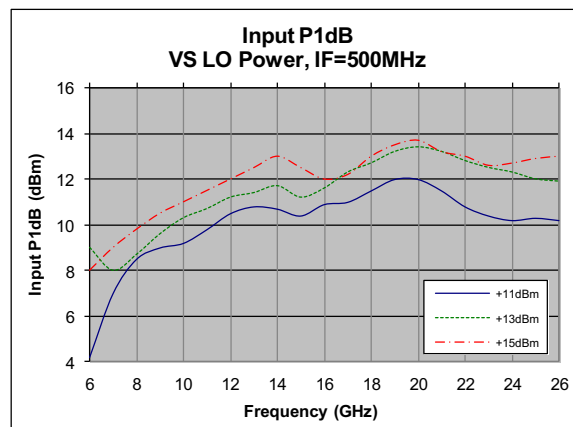
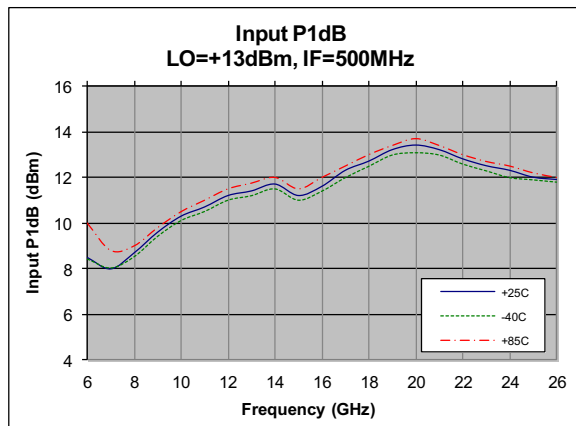
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Typical Performance



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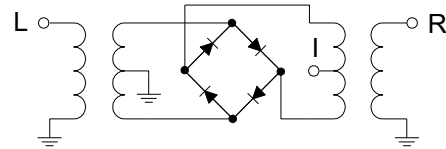


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Absolute Maximum Ratings

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



Outline

