

7-14GHz Frequency Mixer

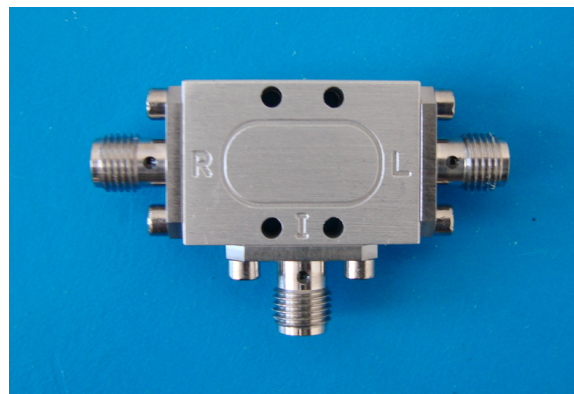
Features

- LO/RF: 7–14GHz
- IF: DC–5GHz
- LO Level: +13dBm
- Conversion Loss: 8dB typ.
- RF Input: Up to +11dBm
- Input IP3: +22dBm
- SMA Female All Ports

Description

HD32511 is a passive double balanced mixer with 7 to 14GHz at RF/LO port and DC to 5GHz at IF port. The mixer operates with LO drive level range from +10dBm to +16dBm.

Picture

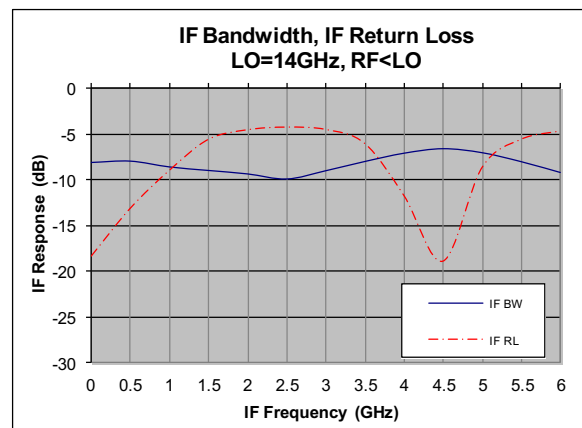
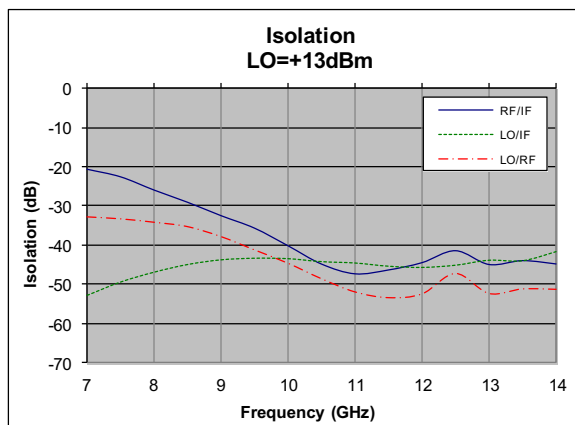
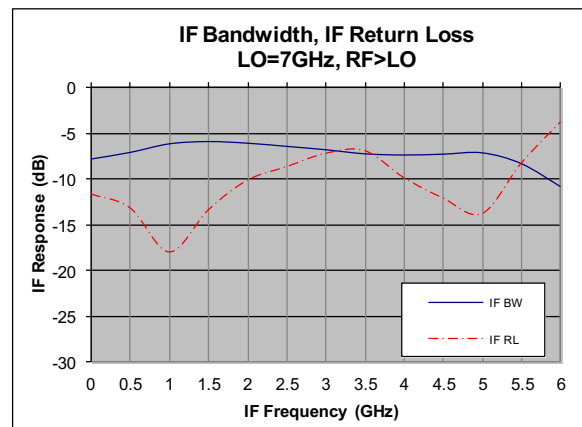
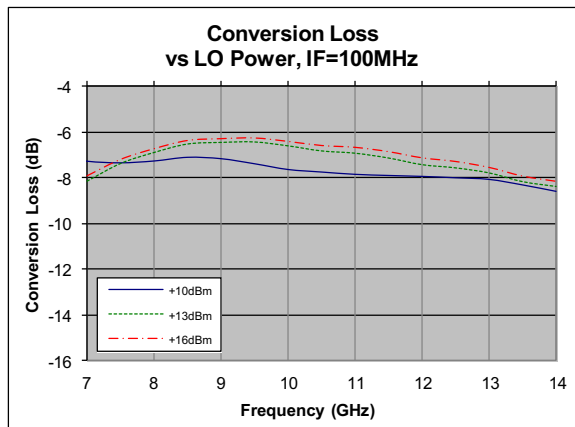
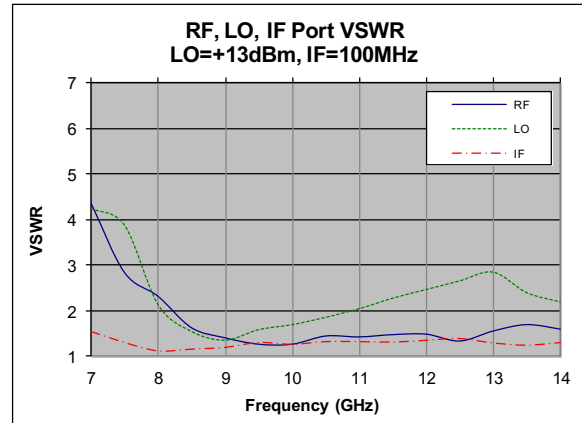
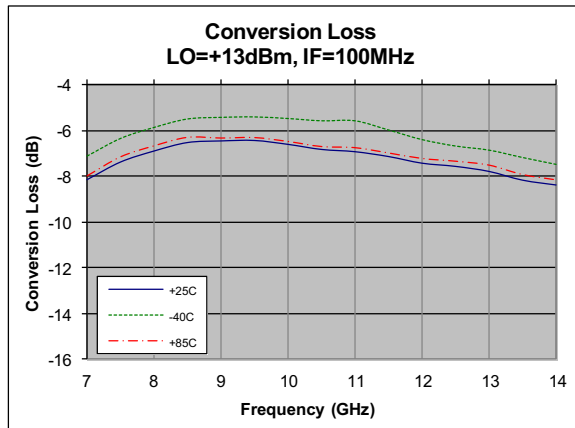


Electrical Specifications @ +25 °C, IF=100MHz, LO=+13dBm, 50 Ω

Parameter		Unit	Minimum	Typical	Maximum
Frequency Range	LO/RF	GHz	7		14
	IF	GHz	DC		5
Conversion Loss	LO/RF: 7-11GHz	dB		7.5	10
	LO/RF: 11-14GHz	dB		8.5	10.5
LO-RF Isolation	LO/RF: 7-11GHz	dB	40	50	
	LO/RF: 11-14GHz	dB	35	45	
LO-IF Isolation	LO/RF: 7-11GHz	dB	28	34	
	LO/RF: 11-14GHz	dB	30	36	
RF-IF Isolation	LO/RF: 7-11GHz	dB	15	22	
	LO/RF: 11-14GHz	dB	25	30	
RF Input P _{1dB}	LO/RF: 7-11GHz	dBm		+10	
	LO/RF: 11-14GHz	dBm		+11.5	
Input IP3	LO/RF: 7-11GHz	dBm		+18	
	LO/RF: 11-14GHz	dBm		+22	

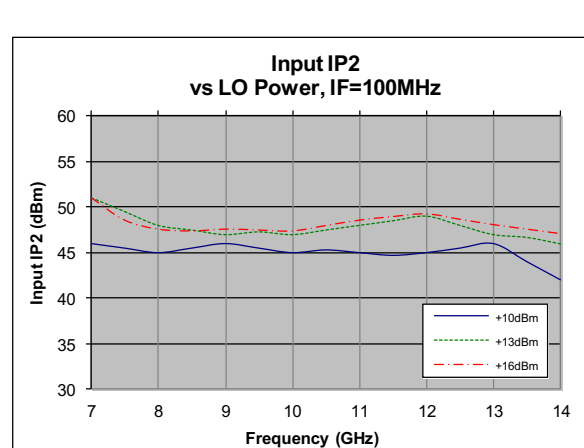
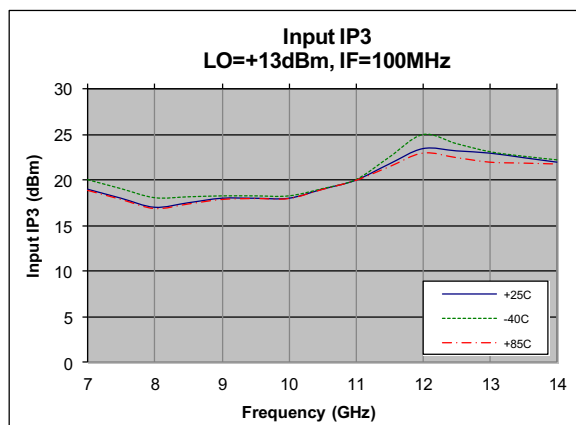
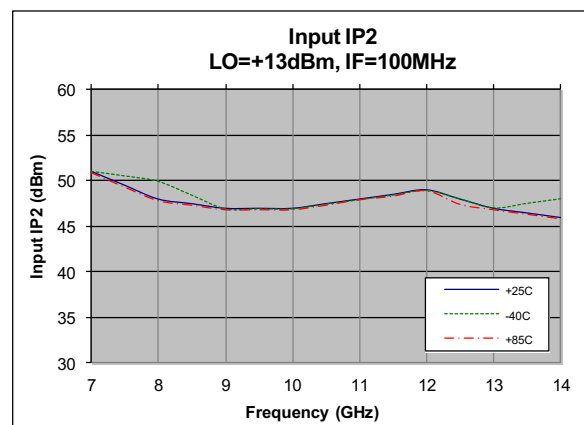
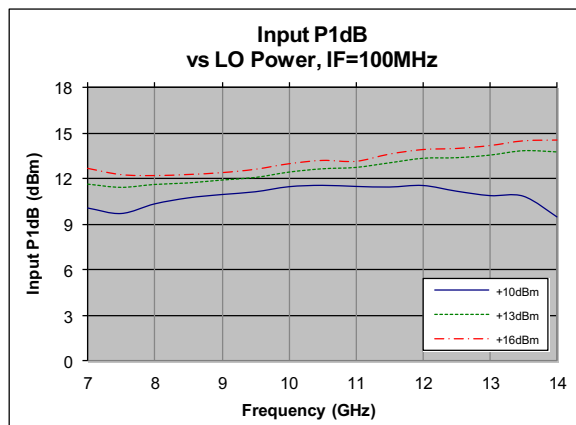
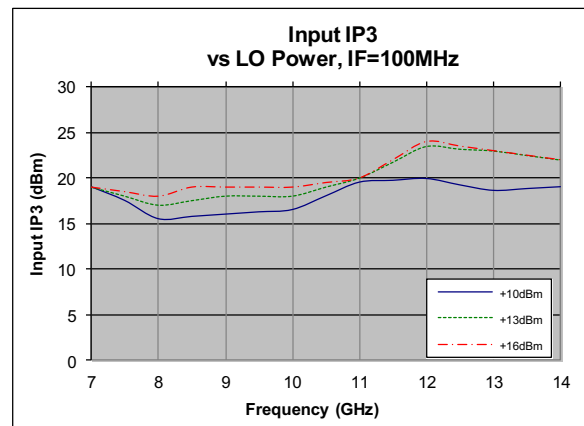
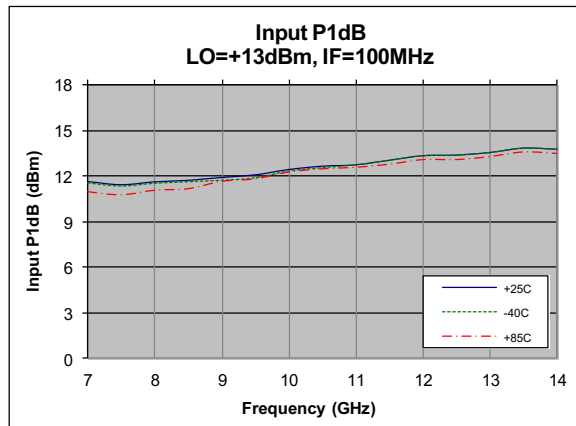
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Typical Performance



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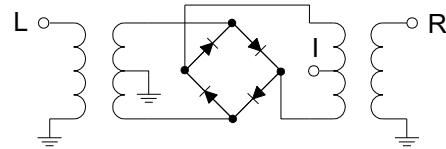


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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Power	+25.5dBm
LO Driver	+25dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-65 °C to +150 °C

Schematic



Outline

