

11-20GHz Frequency Mixer

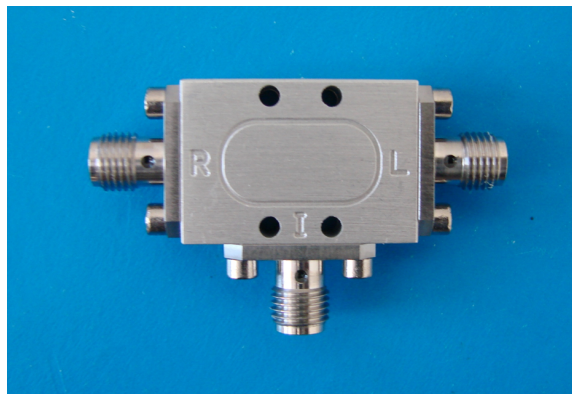
Features

- LO/RF: 11–20GHz
- IF: DC–6GHz
- LO Level: +13dBm
- Conversion Loss: 8dB typ.
- RF Input: Up to +11dBm
- Input IP3: +18dBm
- SMA Female All Ports

Description

HD32513 is a passive double balanced mixer with 11 to 20GHz at RF/LO port and DC to 6GHz at IF port. The mixer operates with LO drive level +13dBm.

Picture

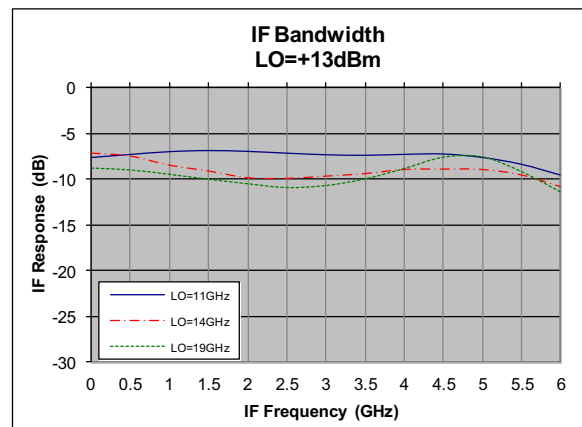
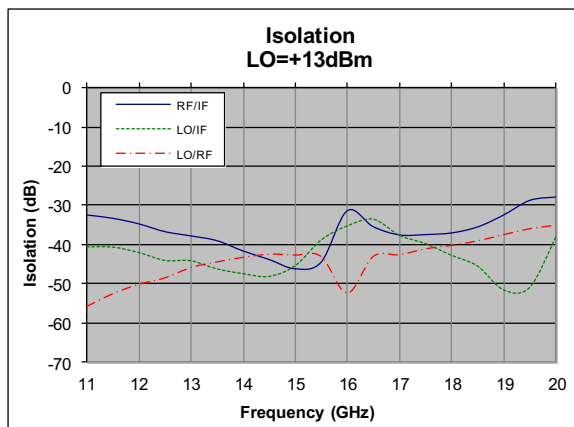
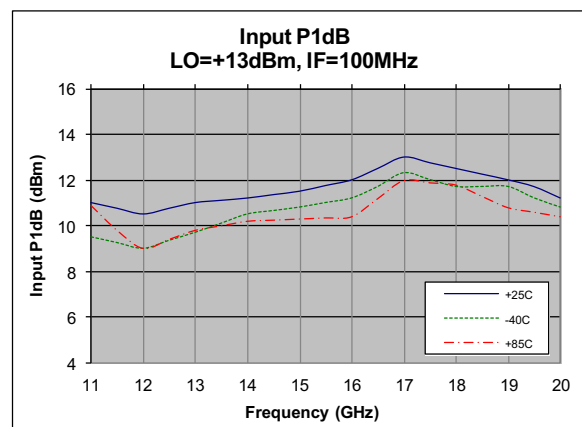
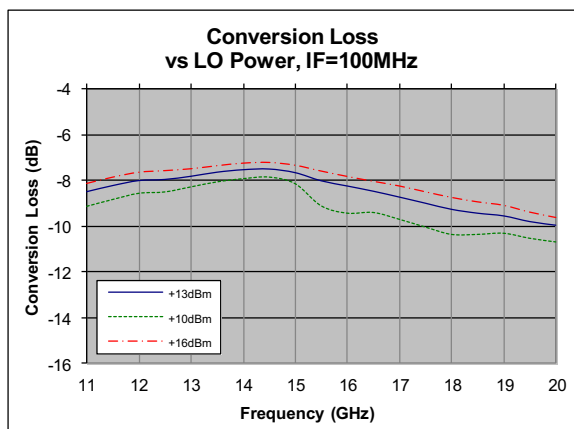
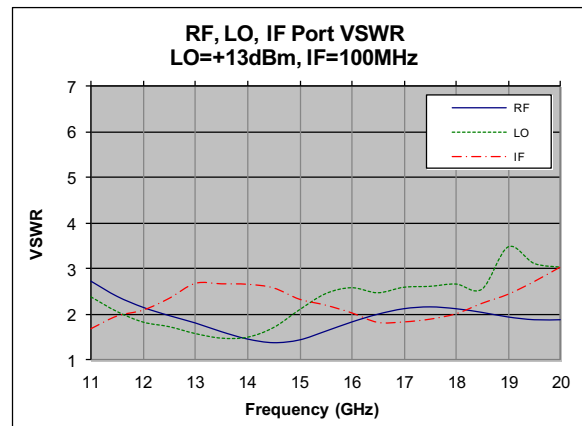
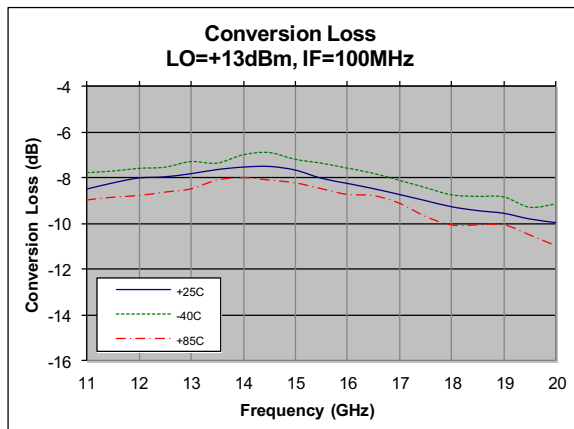


Electrical Specifications @ +25 °C, IF=100MHz, LO=+13dBm, 50 Ω

Parameter		Unit	Minimum	Typical	Maximum
Frequency Range	LO/RF	GHz	11		20
	IF	GHz	DC		6
Conversion Loss	LO/RF: 12-16GHz	dB		7	9
	LO/RF: 11-20GHz	dB		8	11
LO-RF Isolation	LO/RF: 12-16GHz	dB	40	46	
	LO/RF: 11-20GHz	dB	40	46	
LO-IF Isolation	LO/RF: 12-16GHz	dB	34	40	
	LO/RF: 11-20GHz	dB	30	40	
RF-IF Isolation	LO/RF: 12-16GHz	dB	18	25	
	LO/RF: 11-20GHz	dB	15	25	
RF Input P _{1dB}	LO/RF: 12-16GHz	dBm		+11	
	LO/RF: 11-20GHz	dBm		+11	
Input IP3	LO/RF: 12-16GHz	dBm		+18	
	LO/RF: 11-20GHz	dBm		+18	
Input IP2	LO/RF: 12-16GHz	dBm		+48	
	LO/RF: 11-20GHz	dBm		+45	

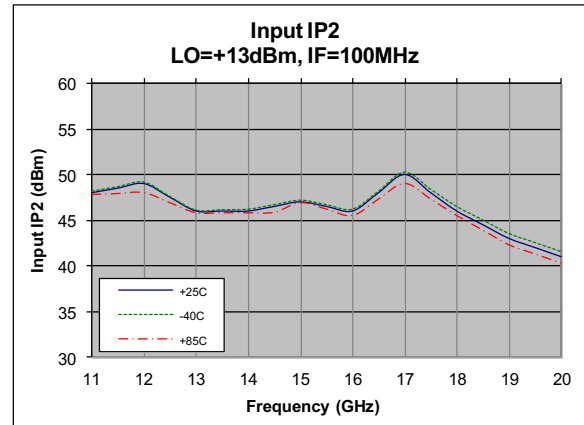
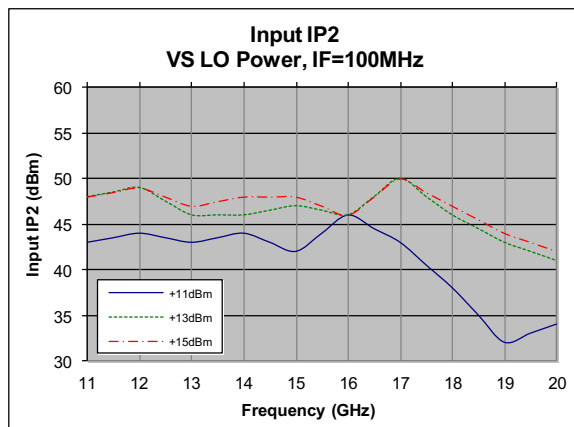
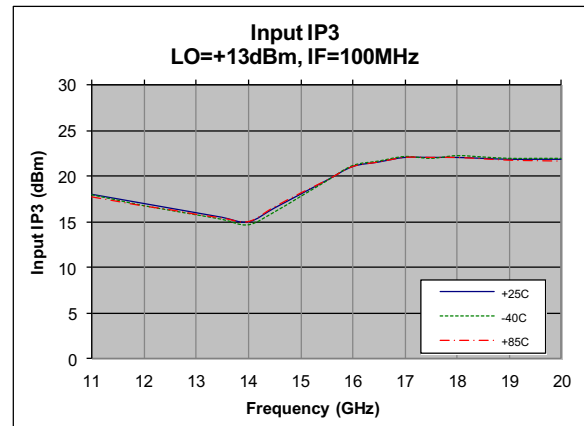
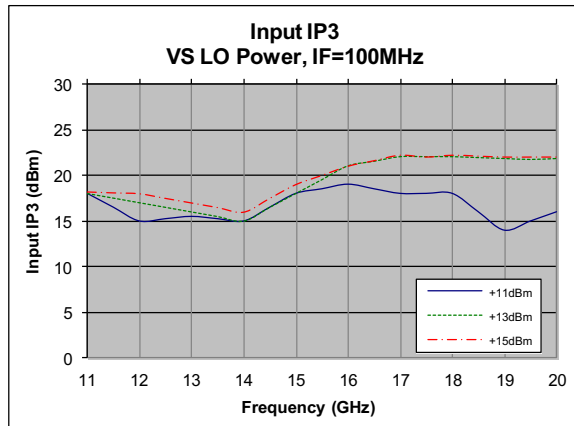
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Typical Performance



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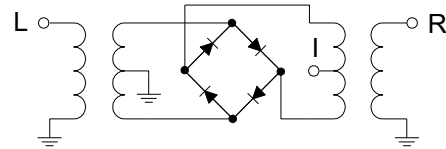


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Absolute Maximum Ratings

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

Schematic



Outline

