

14-26GHz Frequency Mixer

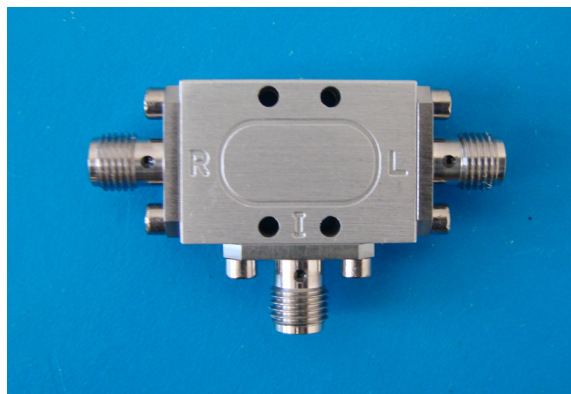
Features

- LO/RF: 14–26GHz
- IF: DC–8GHz
- LO Level: +13dBm
- Conversion Loss: 9dB typ.
- RF Input: Up to +14dBm
- Input IP3: +20dBm
- SMA Female All Ports

Description

HD32514 is a passive double balanced mixer with 14 to 26GHz at RF/LO port and DC to 8GHz at IF port. The mixer operates with LO drive level +13dBm.

Picture

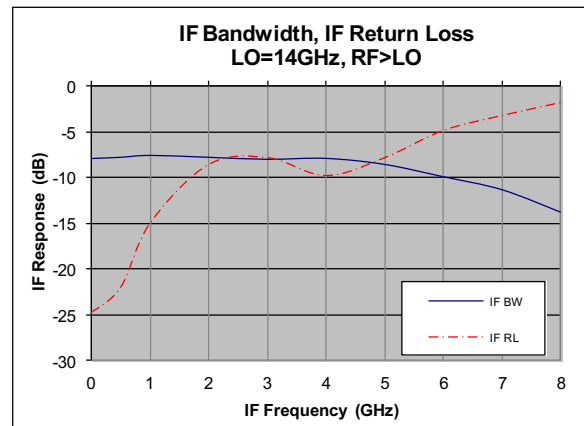
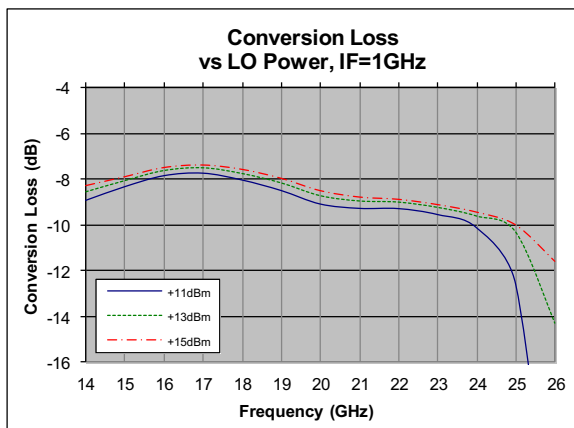
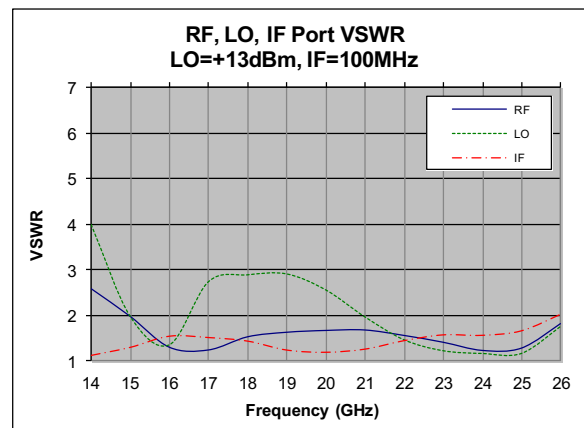
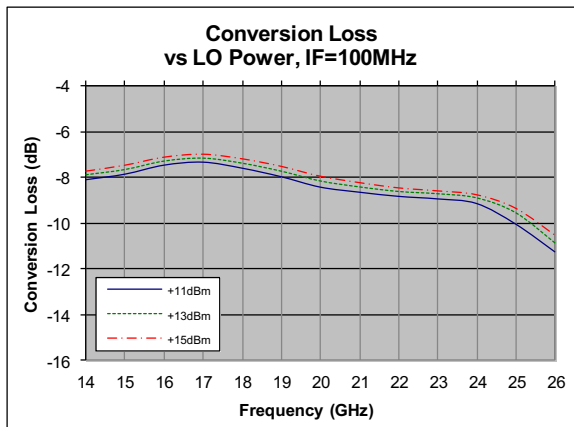
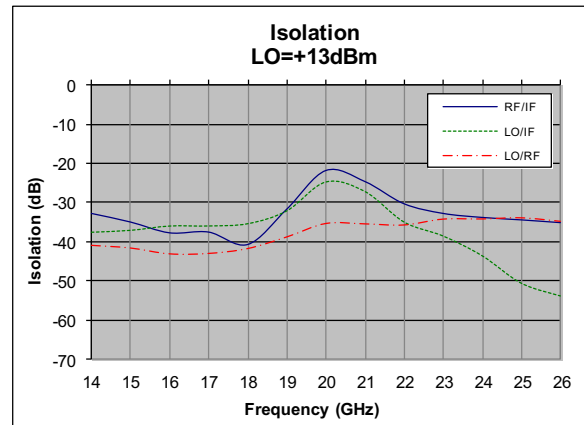
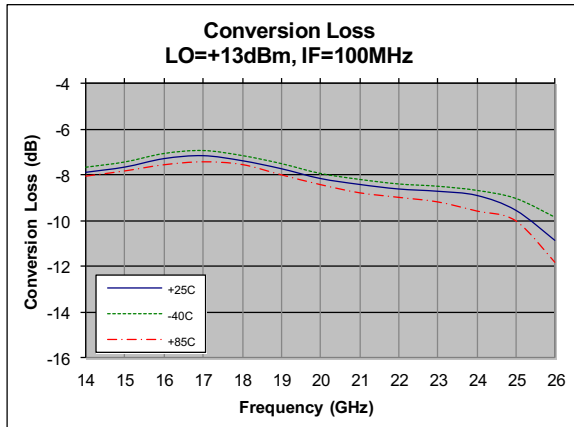


Electrical Specifications @ +25 °C, IF=1GHz, LO=+13dBm, 50 Ω

Parameter		Unit	Minimum	Typical	Maximum
Frequency Range	LO/RF	GHz	14		26
	IF	GHz	DC		8
Conversion Loss	LO/RF: 14-18GHz	dB		8	11
	LO/RF: 18-26GHz	dB		9	12
LO-RF Isolation	LO/RF: 14-18GHz	dB	34	40	
	LO/RF: 18-26GHz	dB	30	35	
LO-IF Isolation	LO/RF: 14-18GHz	dB	24	30	
	LO/RF: 18-26GHz	dB	24	35	
RF-IF Isolation	LO/RF: 14-18GHz	dB	15	25	
	LO/RF: 18-26GHz	dB	25	30	
RF Input P _{1dB}	LO/RF: 14-18GHz	dBm		+12	
	LO/RF: 18-26GHz	dBm		+14	
Input IP3	LO/RF: 14-18GHz	dBm		+18	
	LO/RF: 18-26GHz	dBm		+20	
Input IP2	LO/RF: 14-18GHz	dBm		+50	
	LO/RF: 18-26GHz	dBm		+50	

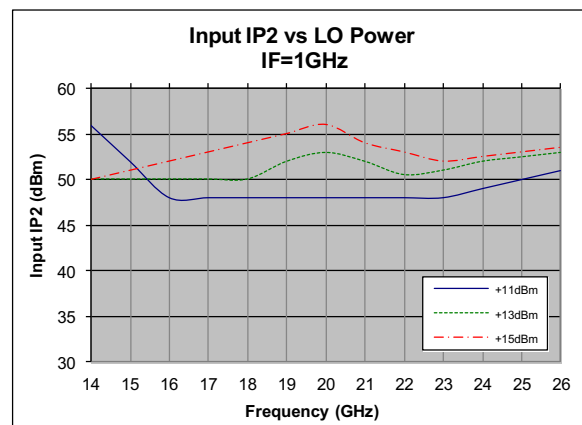
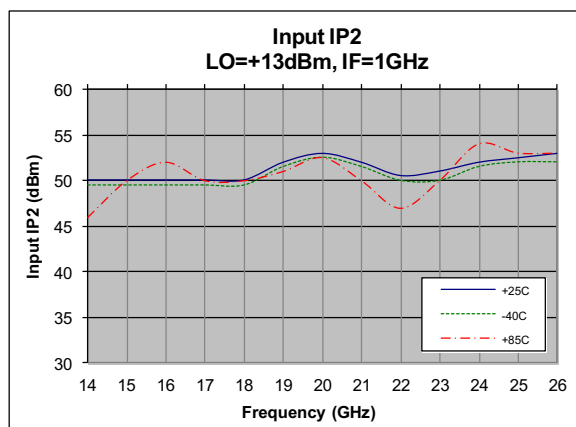
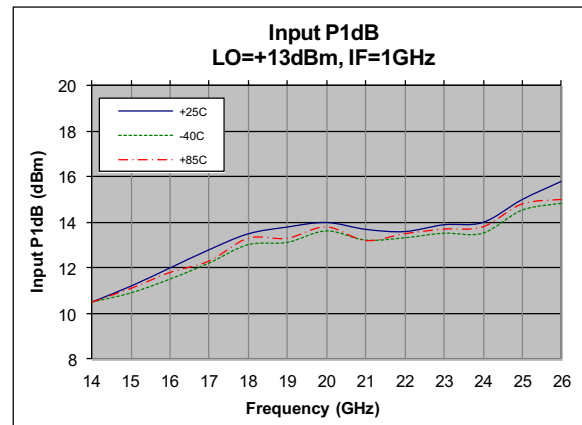
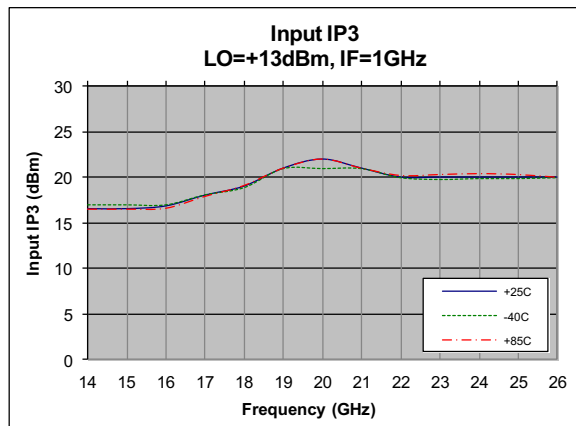
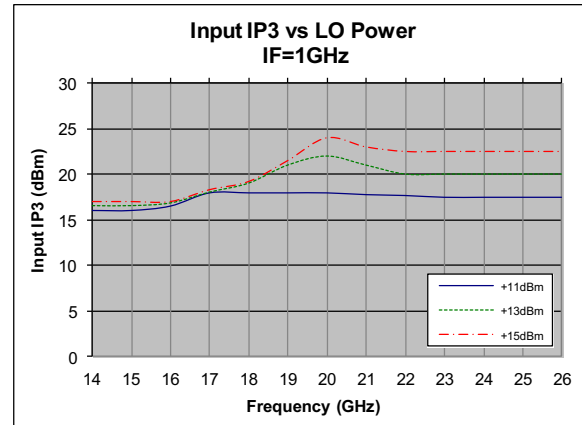
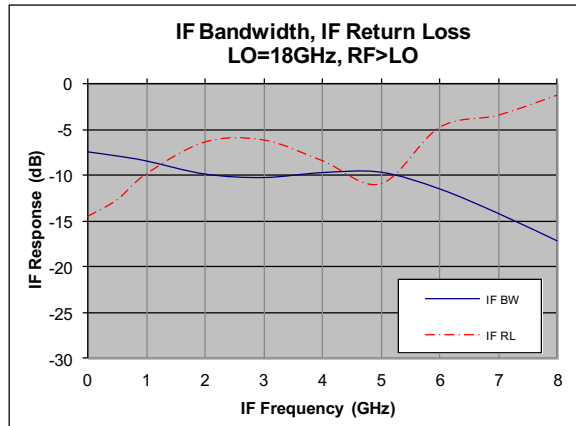
Typical Performance

14-26GHz Frequency Mixer



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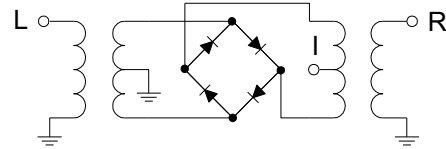


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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF IF Power	+15dBm
LO Driver	+27dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-65 °C to +150 °C

Schematic



Outline

