

5-12GHz Frequency Mixer

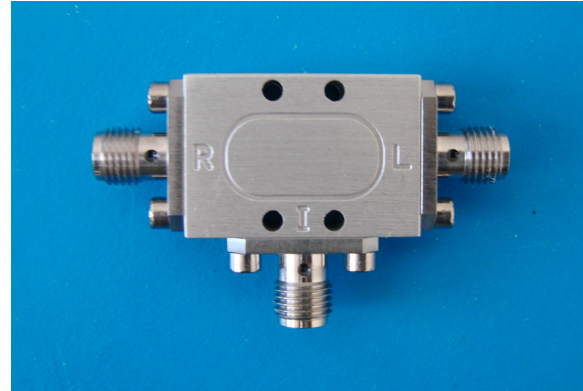
Features

- LO/RF: 5–12GHz
- IF: DC–4GHz
- LO Level: +10dBm
- Conversion Loss: 8.5dB typ.
- RF Input: Up to +8dBm
- Input IP3: +16dBm
- SMA Female All Ports

Description

HD32517 is a passive double balanced mixer with 5 to 12GHz at RF/LO port and DC to 4GHz at IF port. The mixer operates with LO drive level at +10dBm.

Picture



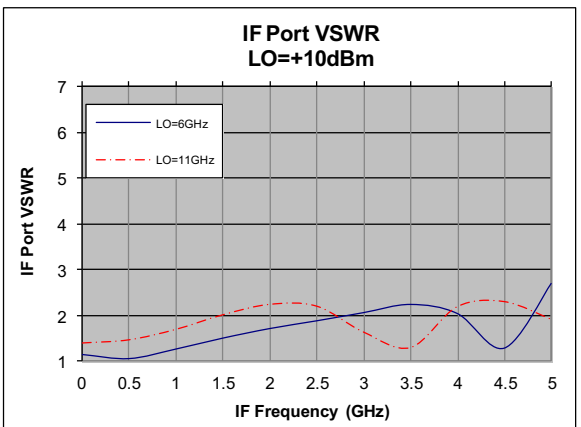
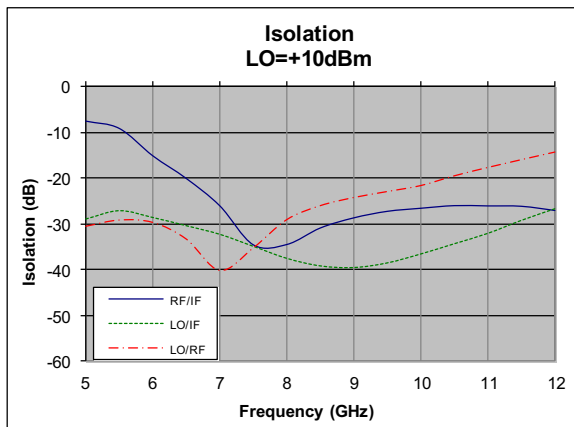
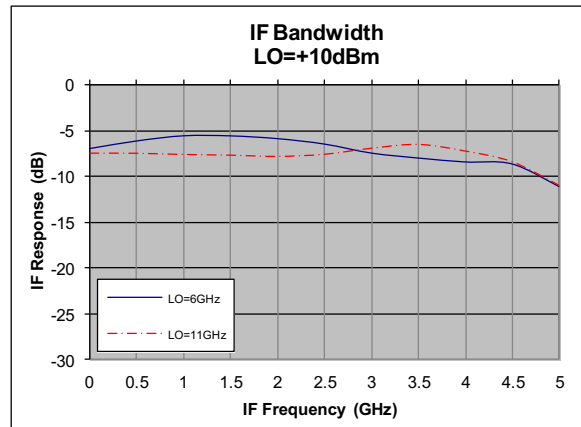
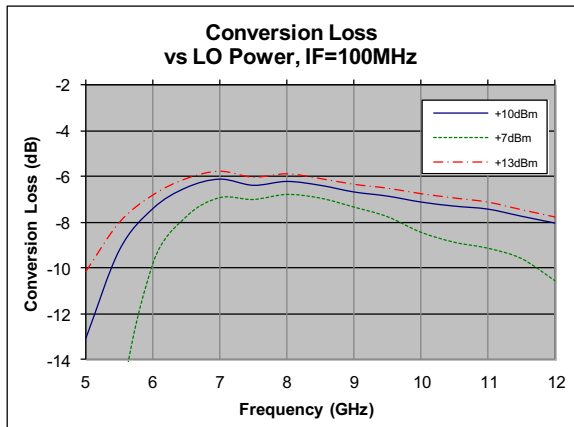
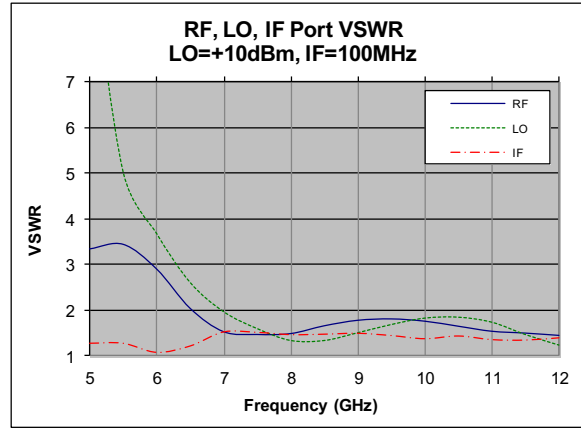
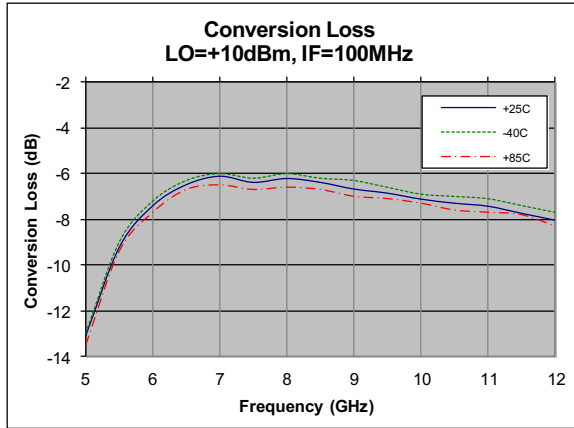
Electrical Specifications @ +25 °C, IF=100MHz, LO=+10dBm, 50 Ω

Parameter		Unit	Minimum	Typical	Maximum
Frequency Range	LO/RF	GHz	5		12
	IF	GHz	DC		4
Conversion Loss	LO/RF: 5-10GHz	dB		7	10
	LO/RF: 10-12GHz	dB		8.5	10.5
LO-RF Isolation	LO/RF: 5-10GHz	dB		25	
	LO/RF: 10-12GHz	dB		18	
LO-IF Isolation	LO/RF: 5-10GHz	dB		28	
	LO/RF: 10-12GHz	dB		20	
RF-IF Isolation	LO/RF: 5-10GHz	dB		25	
	LO/RF: 10-12GHz	dB		25	
RF Input P _{1dB}	LO/RF: 5-10GHz	dBm		+8	
	LO/RF: 10-12GHz	dBm		+8	
Input IP3	LO/RF: 5-10GHz	dBm		+16	
	LO/RF: 10-12GHz	dBm		+18	

Unless otherwise noted, all measurements performed as a downconverter.

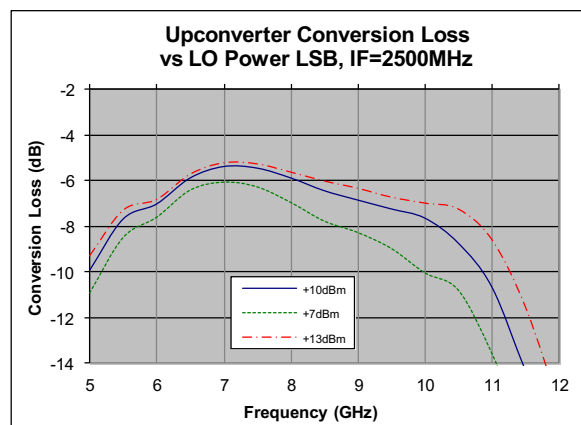
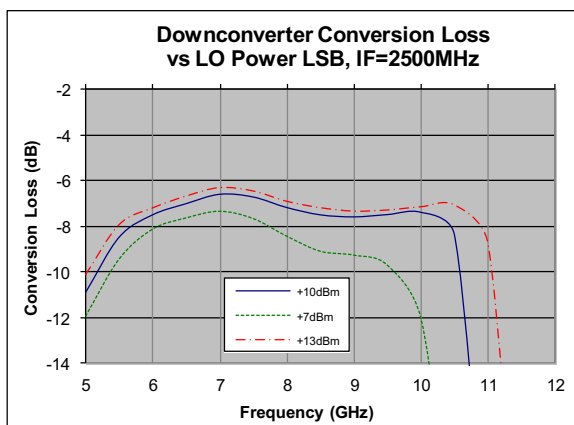
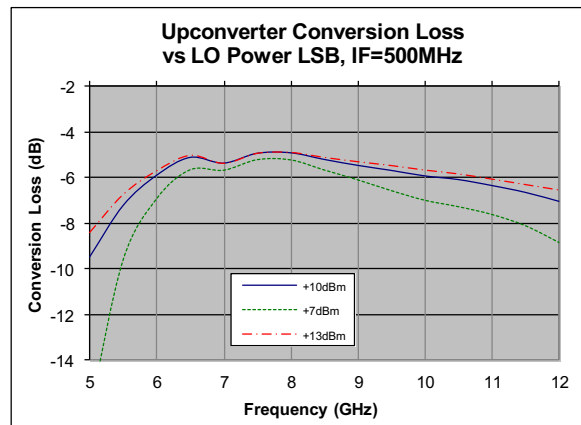
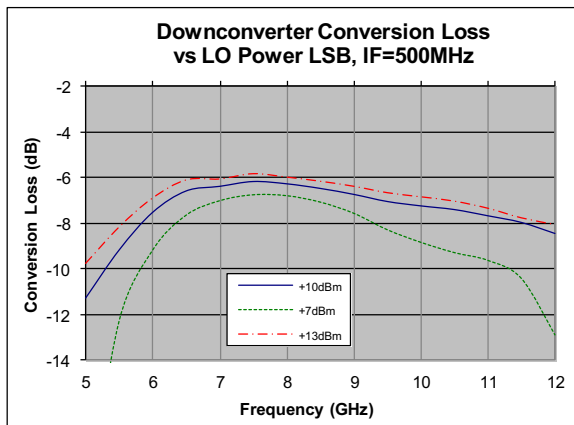
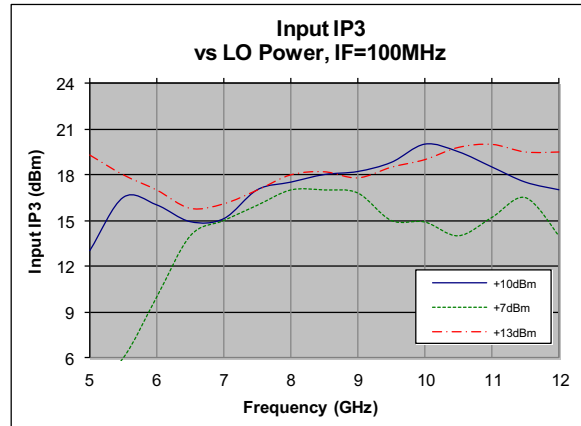
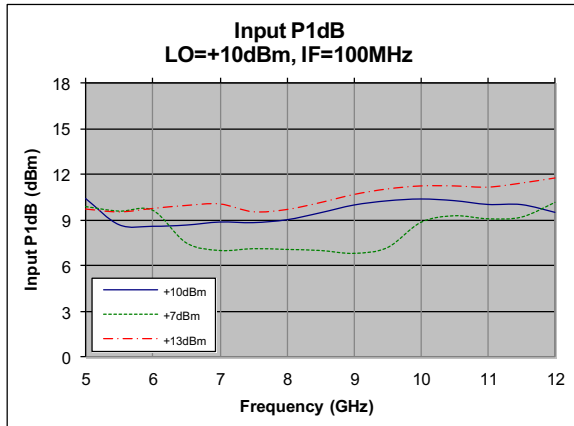
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Typical Performance



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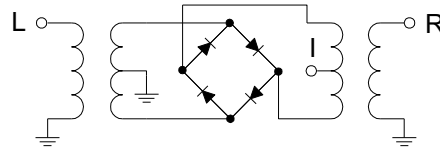


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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF/IF Power	+13dBm
LO Driver	+27dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-65 °C to +150 °C

Schematic



Outline

