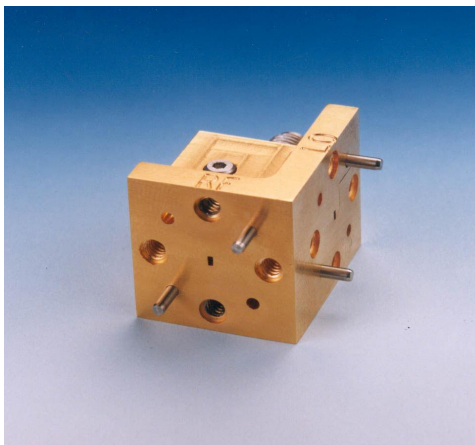


Datasheet**Description**

Farran Technology offers a wide variety of balanced mixers. These are based on planar technology and GaAs Schottky barrier beam lead diodes. They feature low conversion loss, low noise figure, excellent noise suppression and LO-RF isolation. The LO drive requirement can be reduced by operating the mixers with bias. They are extremely rugged devices for small physical size and mass. Designs are chosen from a portfolio of mixer architectures depending on the customer's detailed requirements. IF frequency coverage to at least 18GHz is available and full RF/LO bandwidths may be provided in certain frequency bands.

**Features**

- " Planar GaAs diodes
- " Rugged compact design
- " High reliability
- " Low noise figure & conversion loss
- " Broad bandwidth
- " Biased designs available

Applications

- " Communications
- " Radiometry
- " Radar
- " Laboratory Test Systems

Datasheet

Specification BMC-10 (Unbiased)	Unit	Min	Typ	Max
RF Frequency Range	GHz	75		110
Conversion Loss (Full-band Fixed LO)	dB		7.5	12
Conversion Loss (Full-band Swept LO)	dB		8.5	13
LO power	dBm	+10	+13	
Specification BMC-10B (Biased)	Unit	Min	Typ	Max
RF Frequency Range	GHz	75		110
Conversion Loss (Full-band Fixed LO)	dB		8.5	13
Conversion Loss (Full-band Swept LO)	dB		9	15
LO power	dBm	+0	+3	

Datasheet

Typical Plots:

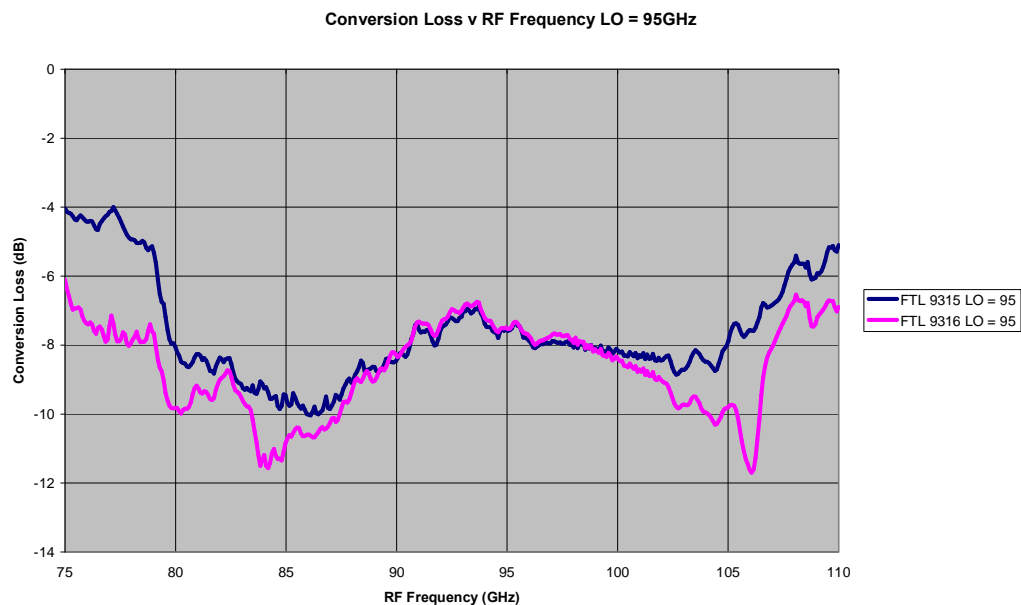


Figure 1 Conversion Loss Full Band (75 – 110 GHz) LO = 95 GHz BMC-10 (Unbiased)

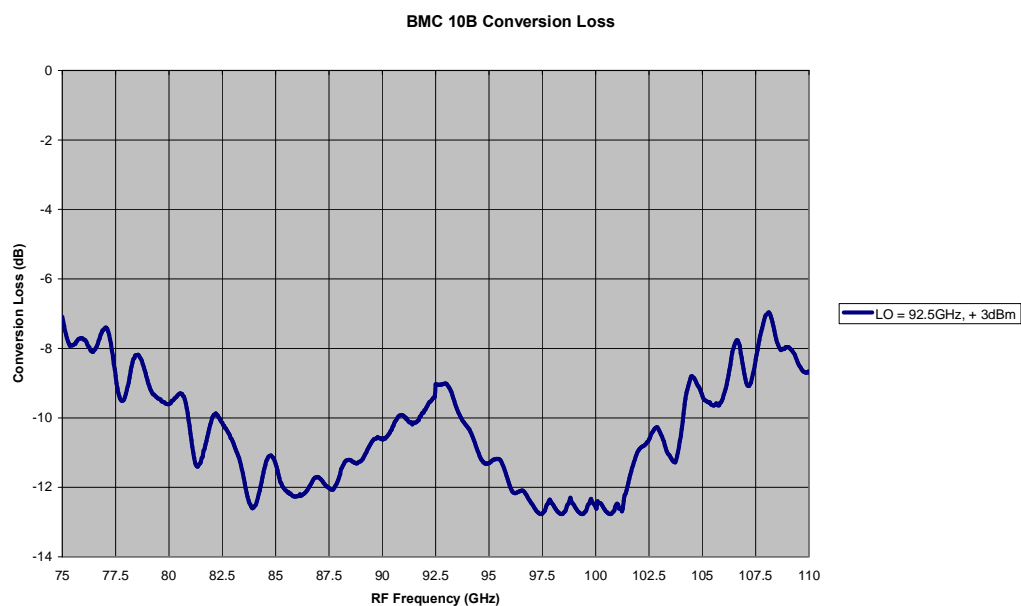


Figure 2 Conversion Loss Full Band (75 – 110 GHz) LO = 92.5 GHz BMC-10B (Biased)

Datasheet

Note:

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