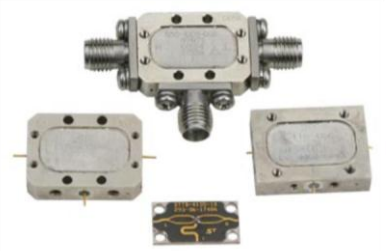


BROADBAND DOUBLE BALANCED MIXERS

FEATURES

- Broad Frequency Coverage
- Low Conversion Loss
- High Isolation
- Drop-In or Connectorized Hermetic Packages
- Storage Temp -65°C to +125°C
- Operating Temp -54°C to +100°C



PERFORMANCE/SPECIFICATIONS @ +25°C

RF/LO Frequency (GHz)	Model Number	IF Frequency (GHz)	Conversion Loss (dB) (Typ./Max.)	Isolation		Conditions Frequency (GHz)	Package Style
				L-R (Typ./Min.)	L-I (Typ./Min.)		
4.0 – 20.0	STDB-2005	DC - 4.0	5.5/7.0 6.0/7.5	43/30 40/25	30/22 30/20	RF/LO 6.0 – 18.0 RF/LO 4.0 – 20.0	I, M
2.0 – 8.0	STDB-2006	DC - 2.0	5.5/7.0 6.0/7.5	37/28 37/28	31/20 31/20	RF/LO 3.0 – 7.0 RF/LO 2.0 – 8.0	I
2.0 – 12.0	STDB-2007	DC - 2.0	6.0/7.5 6.5/8.0	35/25 35/25	30/20 30/20	RF/LO 4.0 – 10.0 RF/LO 2.0 – 12.0	I
6.0 – 18.0	STDB-2008	DC - 4.0	5.0/6.5 5.5/7.0	44/30 40/30	35/25 35/25	RF/LO 8.0 – 16.0 RF/LO 6.0 – 18.0	I, M
8.0 – 14.0	STDB-2009	DC - 4.0	4.5/6.0 5.0/6.5	45/35 45/30	35/25 35/25	RF/LO 9.0 – 13.0 RF/LO 8.0 – 14.0	I, M
10.0 – 26.5	STDB-2010	DC - 4.0	6.0/7.5 6.5/8.0	35/25 35/25	30/20 30/20	RF/LO 12.0 – 24.0 RF/LO 10.0 – 26.5	I, M

Model Number Designation

Model STDB-2005 – I L C — C for SMA Female Connectors
 — L — Local Oscillator Power
 — C — Package Style
 — Double Balanced Design

Local Oscillator Power Options

L Version +7 dBm (Typ 1 dB Input Compression Point +1 dBm)
 M Version +10 dBm (Typ 1 dB Input Compression Point +4 dBm)
 H Version +13 dBm (Typ 1 dB Input Compression Point +7 dBm)

Custom frequency bands, packages and higher power levels are available.

Crane Aerospace & Electronics

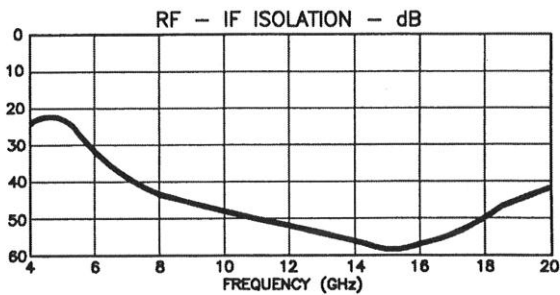
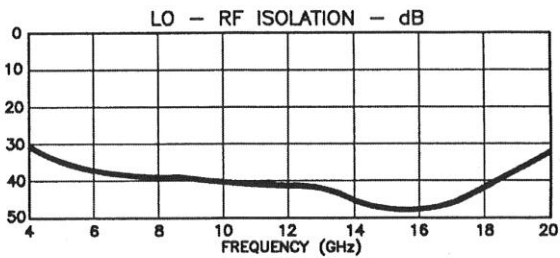
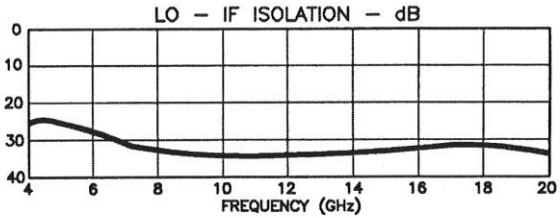
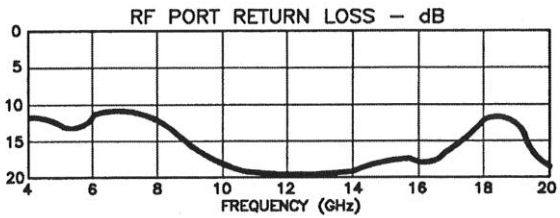
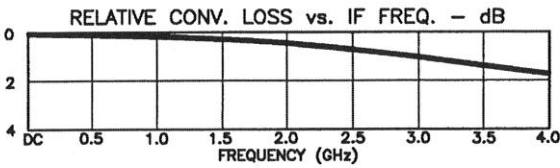
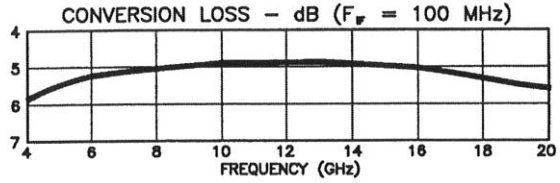
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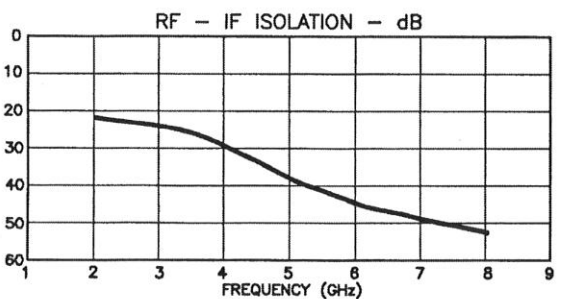
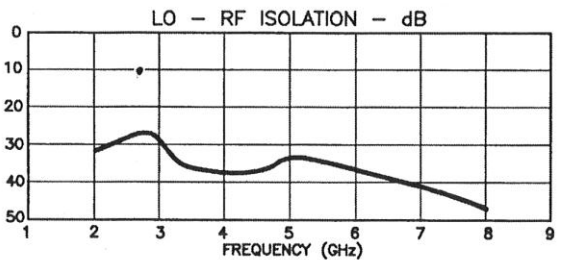
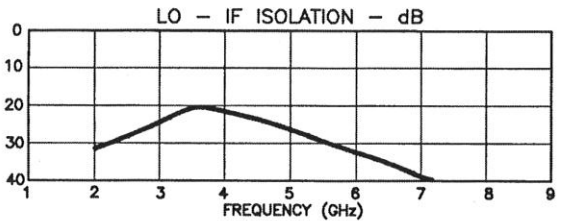
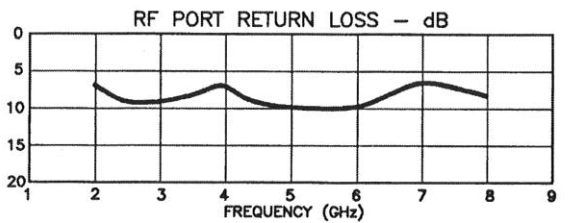
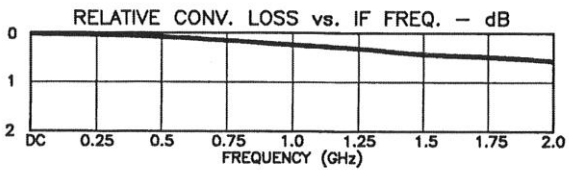
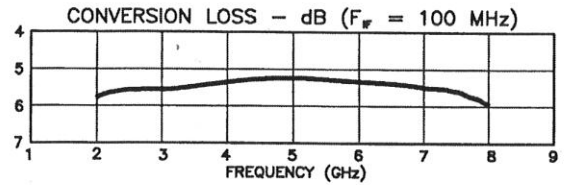
BROADBAND DOUBLE BALANCED MIXERS

TYPICAL PERFORMANCE +25°

MODEL STDB-2005



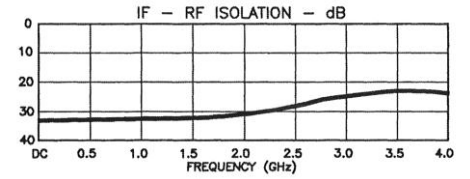
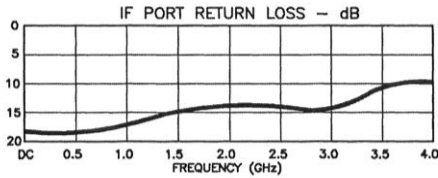
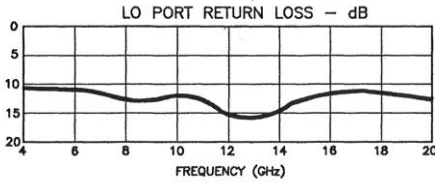
MODEL STDB-2006



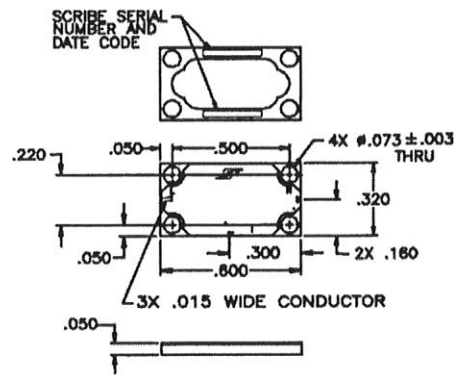
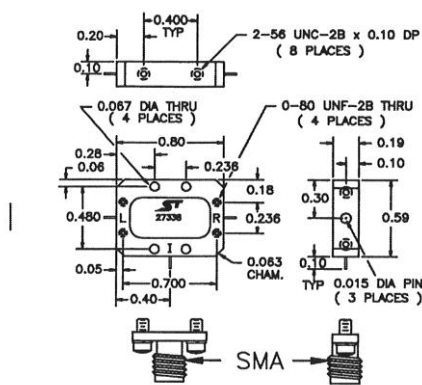
BROADBAND DOUBLE BALANCED MIXERS

TYPICAL PERFORMANCE +25°

MODEL STDB-2005



STANDARD OUTLINES



TYPICAL PERFORMANCE – SINGLE TONE INTERMODULATION PRODUCTS

Test Conditions	IM Product	IM Level, DBC
RF = 6 – 10 GHz @ -10 dBm LO = 6 GHz @ -10 dBm IF = DC – 4 GHz	2L-R	32
	2R-2L	48
	3L-2R	49
	3R-3L	54
	2R-3L	51
	4L-2R	53
RF = 9.6 – 13 GHz @ -10 dBm LO = 13.5 GHz @ +10 dBm IF = 0.5 – 4 GHz	4R-4L	>70
	2L-2R	54
	3R-2L	58
	3L-3R	56
IF IN = 1.5 – 4 GHz @ -10 dBm LO = 11 GHz @ +10 dBm RF OUT = 7 – 9 GHz	3L-4R	>70
	4L-4R	>70
	L-2I	55
	L-3I	60
	2I	50
	3I	>70
	4I	>70
	2L-4I	>70

dBc = dB BELOW DESIRED OUTPUT SIGNAL LEVEL