# DTF-2A-1250 SQ

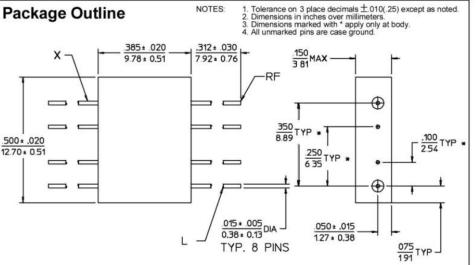
## **TECHNICAL FEATURE**

### **FEATURES**

- 1 to 3500 MHz
- +10 to +15 dBm LO
- Hi-Rel Hermetic Package

RF/LO	LO Drive, Nom.	Operating Range, MHz	Conversion Loss, dB		Port Isolation, Min.			1 dB	Input	1 dB Desens.
Frequency, MHz			Max.	Тур.	L-R dB	L-X dB	R-X dB	Compr. Point	Intercept Point	Level
	+10 dBm	10-200	7.5	6.5	30	30	30	+7 dBm (typ.)	+14 dBm (typ.)	+5 dBm (typ.)
1-3500		200-2500	8.5	7.0	25	25	23			
		1-3500	9.5	8.0	25	25	20			
_	Frequency, MHz	RF/LO Frequency, MHz +10 dBm	RF/LO Frequency, MHzDrive, Nom.Range, MHz1-3500+10 dBm10-200200-2500	RF/LO Frequency, MHz  Drive, Nom.  Range, MHz  Loss    +10 dBm  10-200  7.5    1-3500  200-2500  8.5	RF/LO Frequency, MHz  Drive, Nom.  Range, MHz  Loss, dB    +10 dBm  10-200  7.5  6.5    200-2500  8.5  7.0	RF/LO Frequency, MHz  Drive, Nom.  Range, MHz  Loss, dB    +10 dBm  10-200  7.5  6.5  30    1-3500	RF/LO Frequency, MHz  Drive, Nom.  Range, MHz  Loss, dB  Loss, dB    Max.  Typ.  L-R dB  L-X dB  Loss, dB    1-3500  +10 dBm  10-200  7.5  6.5  30  30    1-3500  8.5  7.0  25  25	RF/LO Frequency, MHz  Drive, Nom.  Range, MHz  Loss, dB     1-3500  +10 dBm  10-200  7.5  6.5  30  30  30    1-3500  +10 dBm  200-2500  8.5  7.0  25  25  23	RF/LO Frequency, MHzDrive, Nom.Range, MHzLoss, dBImage: Loss, dB1 dB Loss, dBMax.Typ.L-R dBL-X dBR-X dBCompr. Point1-3500+10 dBm 200-250010-2007.56.5303030+7 dBm (typ.)	RF/LO Frequency, MHzDrive, Nom.Range, MHzLoss, dBImage, Loss, dBLoss, dBImage, Loss, dBImage,<

All Specifications are as measured in a  $50\Omega$  system, at nominal LO power in a down converter application



#### General Specifications

IF Frequency Range:	1-1000 MHz
Impedance:	50 Ω Nom.
3 <sup>rd</sup> Order Intermodulation	
Ratio Degradation:	3 dB typ. For IF
	VSWR of 3.0:1
Useful LO Drive Range:	+/- 3 dB Nom.
SSB Noise Figure:	Within +/- 1 dB of
	<b>Conversion Loss</b>
Weight, Nom.:	0.15 oz (4.2g)
Operating Temperature:	-55°C to + 85°C

#### **General Notes:**

- The DTF-A series Termination Insensitive Mixer cover the frequency range of 1 to 3500 MHz using transmission line hybrid junction techniques to isolate the diode rings from termination mismatch-induced reflections. This means the intermodulation ratio is independent of the IF port load impedance, so this unit is ideal for applications where a high performance mixer must drive a reactive load (e.g. filter) at the IF port. The DTF-A series and related models are available in PC, SMD and connectorized packages.
- 2. Crane offers a broad selection of Double Balanced Mixers ideal for a variety of signal processing functions with frequencies ranging from 20 kHz to 20 GHz and for applications from routing to very special.
- 3. Crane mixers comply with MIL-M-28837 and is qualified for Space Application requiring the highest reliability.



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