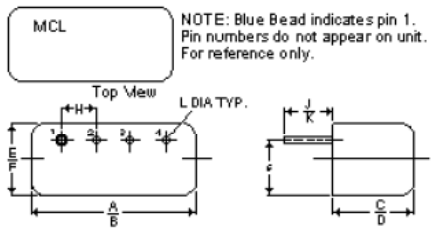
Frequency Mixers

LO Power Level 7 dBm

Pin Configuration

Port	LO	RF	IF	Gnd	Ext. Case Gnd	Not Used
z	4	1	2	3	3	-

Outline Drawing



Case Style - B02 (inch,mm) weight: 1.9 grams.

A	B	C	D	E	F	G	H	J
.480	.500	.240	.255	.210	.230	.16	.100	.14
12.192	12.700	6.096	6.477	5.334	5.842	4.064	2.540	3.556

K	L	M	N	P	Q	R	S	T
.20	.020							
5.080	0.508							

Tolerance: .x ± .1 .xx ± .03 .xxx ± .015 inch.

Material and Finish:

Header material: C.R.S. Pin material: #52 alloy. Finish: electro tin, hot-oil flowed. Cover material:upro-nickel.

Mounting:

Insulated spacer available. Request P/N B-14-047-01.

Pin's meniscus (of header): 0.015" max.

Special Tolerances:

Pin diameter ±.005 inch.

Notes:

- +7dBm LO, up to +1 dBm RF
- Absolute maximum power, voltage and current ratings:
  a. RF power, 50mW
  b. Peak IF current, 40mA
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- Prices and Specifications subjects to change without notice.

TFM-2

Electrical Specifications

TFM-2 LO Power Level 7 dBm

Frequency MHz		Max. Conversion Loss dB		Min. LO-RF Isolation dB			Min. LO-IF Isolation dB		
LO/RF	IF	Mid-Band	Total Range	L	M	U	L	M	U
1.000-1000	DC-1000	7.5	8.5	45	25	25	40	25	18

L=low range(f_L to 10f_L) M=mid range(10f_L to f_U/2) U=upper range(f_U/2 to f_U)

Typical Performance Data

TFM-2		Conversion Loss (dB)			ISO	Isolation L-R (dB)			Isolation L-I (dB)		
RF MHz	LO MHz	LO +4 dBm	LO +7 dBm	LO +10 dBm	LO (MHz)	LO +4 dBm	LO +7 dBm	LO +10 dBm	LO +4 dBm	LO +7 dBm	LO +10 dBm
1.000	31.000	7.65	7.23	7.05	1.000	64.00	67.00	70.00	64.00	67.00	70.00
2.000	32.000	6.99	6.50	6.38	2.000	64.00	67.00	70.00	64.00	67.00	70.00
5.000	35.000	6.14	5.80	5.68	5.000	64.00	67.00	70.00	64.00	67.00	70.00
10.000	40.000	6.01	5.62	5.47	10.000	64.00	67.00	70.00	64.00	67.00	70.00
20.000	50.000	6.10	5.68	5.51	20.000	64.00	67.00	70.00	64.00	67.00	70.00
50.000	80.000	5.94	5.58	5.44	50.000	64.00	61.94	60.30	64.00	63.74	61.51
100.000	70.000	5.88	5.53	5.39	100.000	56.03	54.33	53.23	55.98	54.76	53.00
167.340	137.340	5.89	5.57	5.44	167.340	50.05	48.65	48.08	48.75	47.61	47.01
233.870	203.870	6.02	5.72	5.54	233.870	46.08	45.10	44.88	43.82	43.03	43.10
300.400	270.400	5.74	5.45	5.37	300.400	43.14	42.56	42.56	40.29	40.00	40.23
366.940	336.940	6.01	5.73	5.58	366.940	40.77	40.45	40.57	37.73	37.57	38.18
466.740	436.740	6.15	5.82	5.66	466.740	38.41	38.33	38.72	33.78	34.32	35.36
500.000	470.000	6.05	5.72	5.56	500.000	38.98	38.80	39.09	33.83	34.10	34.86
599.810	569.810	6.34	6.02	5.78	599.810	38.50	37.43	36.87	32.71	32.81	32.88
666.340	636.340	6.54	6.11	5.88	666.340	38.54	37.94	37.43	31.60	31.57	31.51
799.410	769.410	7.07	6.27	5.92	799.410	35.96	36.06	36.24	29.94	29.67	29.67
832.680	802.680	7.29	6.46	6.03	832.680	35.29	35.22	35.39	28.80	28.79	28.42
899.210	869.210	7.77	7.00	6.39	899.210	34.14	33.77	33.77	26.59	26.14	25.92
932.480	902.480	8.11	7.37	6.84	932.480	33.72	33.17	33.14	25.85	25.03	24.52
1000.000	969.000	8.20	7.63	7.18	1000.000	33.25	32.49	32.14	24.75	23.59	22.58

RF/LO	VSWR RF port			VSWR LO port			IF	VSWR IF port			Ø detection		
FREQ. (MHz)	LO +4 dBm	LO +7 dBm	LO +10 dBm	LO +4 dBm	LO +7 dBm	LO +10 dBm	FREQ. (MHz)	LO +4 dBm	LO +7 dBm	LO +10 dBm	FREQ. MHz	max.DC output mV	DC offset mV
5.001	1.26	1.30	1.34	1.77	2.70	4.33	5.001	1.43	1.24	1.09	1.00	-230.07	0.09
10.000	1.12	1.15	1.20	1.71	2.63	3.91	10.000	1.44	1.25	1.10	2.00	-234.86	0.09
20.000	1.04	1.07	1.15	1.76	2.77	3.95	20.000	1.43	1.25	1.10	5.00	-240.18	0.08
50.000	1.02	1.06	1.15	1.69	2.55	3.74	50.000	1.44	1.25	1.11	20.00	-240.24	0.09
100.000	1.06	1.07	1.14	1.63	2.41	3.37	100.000	1.45	1.27	1.13	50.00	-236.50	0.09
155.760	1.09	1.09	1.14	1.61	2.37	3.24	155.760	1.49	1.31	1.18	100.00	-238.59	0.08
200.000	1.12	1.11	1.14	1.54	2.29	3.18	200.000	1.54	1.36	1.23	161.97	-242.90	0.06
306.520	1.18	1.16	1.16	1.53	2.20	2.95	306.520	1.66	1.48	1.35	200.00	-243.36	0.02
366.820	1.21	1.18	1.17	1.52	2.16	2.89	366.820	1.75	1.57	1.44	290.75	-246.83	0.11