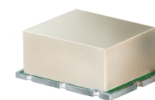


Surface Mount Frequency Mixer

SYM-2+ SYM-2

Level 7 (LO Power +7 dBm) 2 to 1000 MHz



CASE STYLE: TTT166
PRICE: \$11.95 ea. QTY (1-9)

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Pin Connections

LO	2
RF	1
IF	3
GROUND	4,5,6

Features

- low conversion loss, 5.4 dB typ.
- excellent L-R & L-I isolation, 50 dB typ.
- IF response to DC

Applications

- VHF TV
- cellular
- GSM/ISM

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

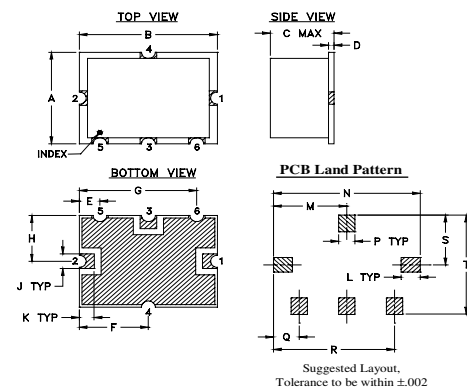
Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			IP3 at center band (dBm)						
		L	M	U	L	M	U							
2-1000	DC-1000	70	45	50	30	40	25	63	40	48	24	37	20	17

1 dB COMP.: +1 dBm typ.

L = low range [f_l to $10 f_l$]
M = mid band [$2 f_l$ to $f_l/2$]
U = upper range [$f_l/2$ to f_u]

Outline Drawing

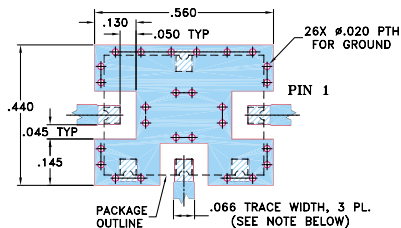


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.38	.50	.15	.020	.075	.250	.425	.187	.050
9.65	12.70	3.81	0.51	1.91	6.35	10.80	4.75	1.27

K	L	M	N	P	Q	R	S	T	wt.
.050	.070	.270	.540	.060	.095	.445	.208	.415	grams
1.27	1.78	6.86	13.72	1.52	2.41	11.30	5.28	10.54	0.8

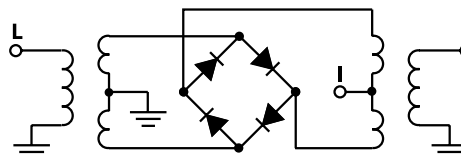
Demo Board MCL P/N: TB-12
Suggested PCB Layout (PL-079)



Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
1.00	31.00	7.23	>67.00	>67.00	1.30	2.70
2.00	32.00	6.50	>67.00	>67.00	1.15	2.63
5.00	35.00	5.80	>67.00	>67.00	1.07	2.77
10.00	40.00	5.62	>67.00	>67.00	1.06	2.55
20.00	50.00	5.68	>67.00	>67.00	1.07	2.41
50.00	80.00	5.58	61.94	63.74	1.09	2.37
100.00	70.00	5.53	54.33	54.76	1.11	2.29
167.34	137.34	5.57	48.65	47.61	1.16	2.20
233.87	203.87	5.72	45.10	43.03	1.18	2.16
300.40	270.40	5.45	42.56	40.00	1.20	2.13
366.94	336.94	5.73	40.45	37.57	1.22	2.06
466.74	436.74	5.82	38.33	34.32	1.23	2.13
500.00	470.00	5.72	38.80	34.10	1.26	2.09
599.81	569.81	6.02	37.43	32.81	1.29	2.09
666.34	636.34	6.11	37.94	31.57	1.34	2.04
799.41	769.41	6.27	36.06	29.67	1.40	2.13
832.68	802.68	6.46	35.22	28.79	1.47	2.19
899.21	869.21	7.00	33.77	26.14	1.55	2.24
932.48	902.48	7.37	33.17	25.03	1.66	2.28
1000.00	969.00	7.63	32.49	23.59	1.72	2.30

Electrical Schematic



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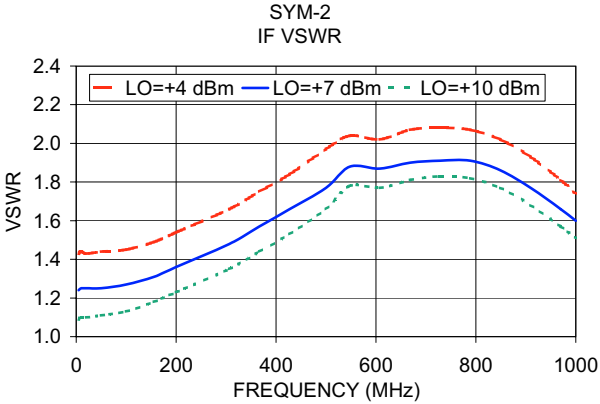
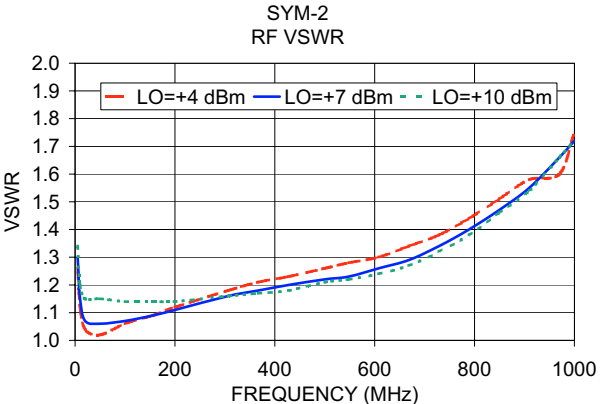
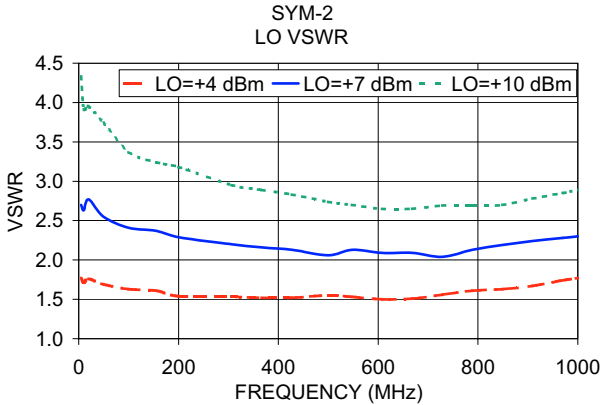
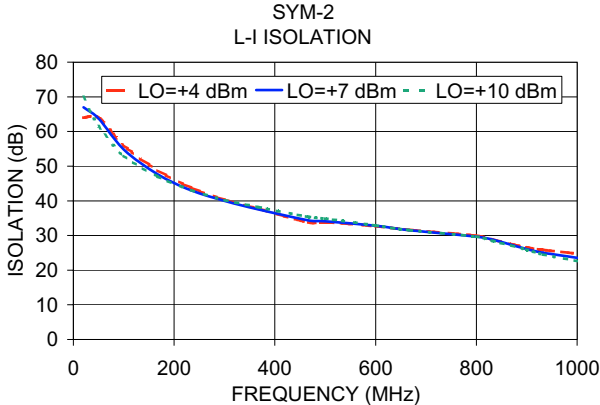
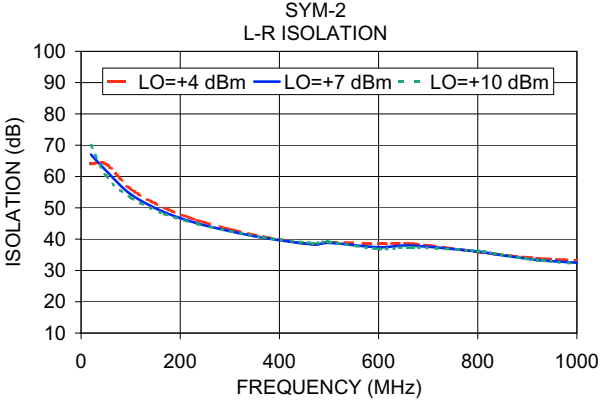
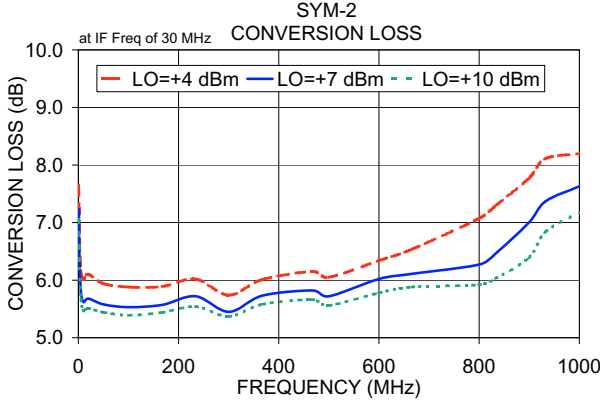


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Performance Charts



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