

Surface Mount Frequency Mixer

RMS-5L+ RMS-5L

Level 3 (LO Power +3 dBm) 400 to 1400 MHz



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	1
RF	4
IF	5
GROUND	2,3,6

Features

- good conversion loss, 7.0 dB typ.
- small size, 0.25" x 0.31" x 0.2"
- wide bandwidth, 400-1400 MHz

Applications

- cellular
- ISM/GSM
- satellite distribution

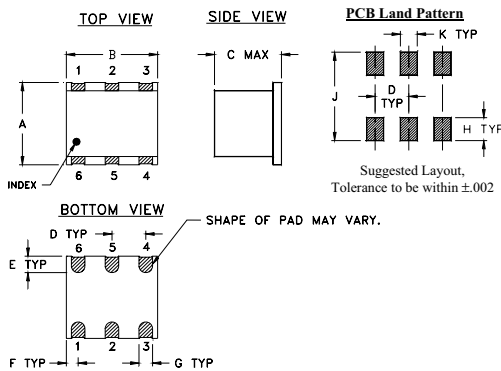
CASE STYLE: TT240

PRICE: \$13.95 ea. QTY (1-9)

**+ 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.

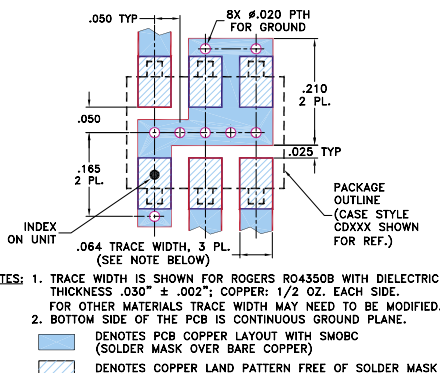
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.250	.31	.20	.100	.050	.055	
6.35	7.87	5.08	2.54	1.27	1.40	
G	H	J	K			wt
.040	.070	.270	.050			grams
1.02	1.78	6.86	1.27			0.50

Demo Board MCL P/N: TB-03
Suggested PCB Layout (PL-052)



Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)	LO-IF ISOLATION (dB)	IP3 at center band (dBm)
LO/RF IF	\bar{X} σ Max.	Typ. Min.	Typ. Min.	Typ.
$f_i - f_u$				
400-1400 DC-800	7.0 0.2 9.8	22 14	22 6	9

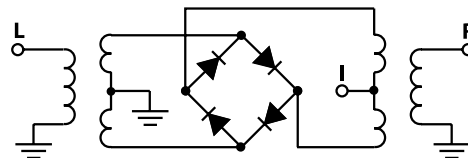
1 dB COMP.: -3 dBm typ.
For phase detection, DC output positive with in-phase RF & LO.

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

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 +3dBm	LO +3dBm	LO +3dBm	LO +3dBm	LO +3dBm
400.00	430.00	7.74	39.94	28.82	1.50	1.45
476.92	506.92	6.92	43.12	28.11	1.40	1.53
553.85	583.85	6.37	56.16	27.98	1.38	1.56
605.13	635.13	6.19	41.52	27.30	1.28	1.64
630.77	660.77	6.10	37.96	26.89	1.19	1.71
707.69	737.69	5.93	29.29	24.68	1.16	1.75
733.33	763.33	5.89	27.74	24.04	1.17	1.78
810.26	840.26	5.81	24.32	21.96	1.17	1.80
835.90	865.90	5.95	23.55	21.29	1.18	1.85
887.18	917.18	6.28	22.39	20.26	1.20	1.93
912.82	942.82	6.26	21.89	19.74	1.24	2.03
989.74	959.74	6.84	20.56	17.73	1.26	2.10
1066.67	1036.67	7.26	19.47	15.58	1.27	2.18
1117.95	1087.95	7.40	18.97	14.31	1.29	2.28
1143.59	1113.59	7.64	18.77	13.78	1.30	2.34
1220.51	1190.51	7.63	18.25	12.26	1.32	2.51
1297.44	1267.44	7.75	17.96	10.95	1.32	2.68
1348.72	1318.72	7.73	17.87	10.20	1.33	2.89
1374.36	1344.36	7.64	17.90	9.72	1.34	2.98
1400.00	1370.00	7.79	17.92	9.13	1.35	3.06

Electrical Schematic



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RF/IF MICROWAVE COMPONENTS

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Performance Charts

