

Frequency Mixer

Level 7 (LO Power +7dBm) 350 to 2000 MHz

RMS-11F+



CASE STYLE: TT240

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

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

Features

- excellent L-R isolation, 36 dB typ.
- conversion loss, 55 dB typ.
- small size, 0.25"x0.31"x0.2"

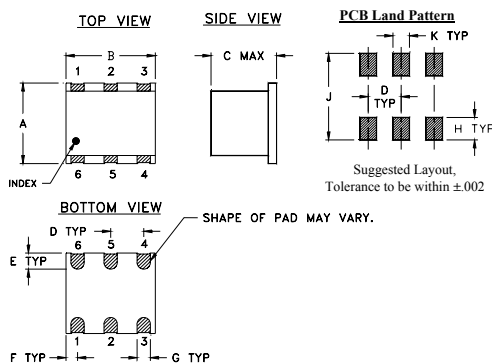
Applications

- GSM
- GPS
- PCS
- satellite distribution

+RoHS Compliant

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

Outline Drawing

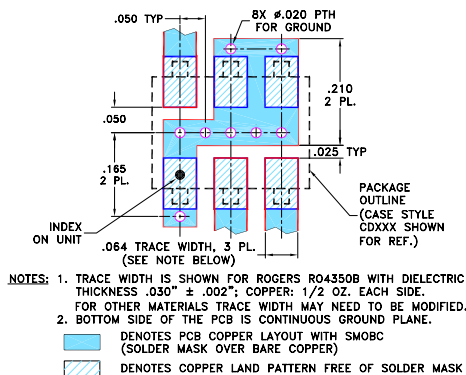


Outline Dimensions (inch)

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)



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)	LO-IF ISOLATION (dB)	IP3 at center band (dBm)
LO/RF IF				
$f_L - f_U$	$\bar{X}$ σ Max. Total Range Max.	L M U	L M U	Typ.
350-2000 DC-400	5.5 .20 7.0 9.2	Typ. Min. Typ. Min. Typ. Min.	Typ. Min. Typ. Min. Typ. Min.	12

1 dB COMP: +1 dBm typ.

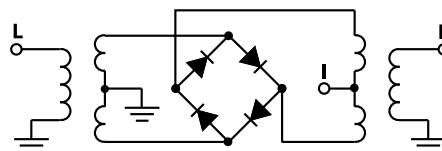
L = 350-750 MHz m = 350-1000 MHz

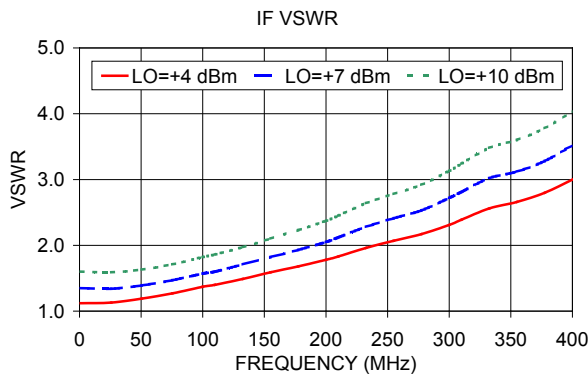
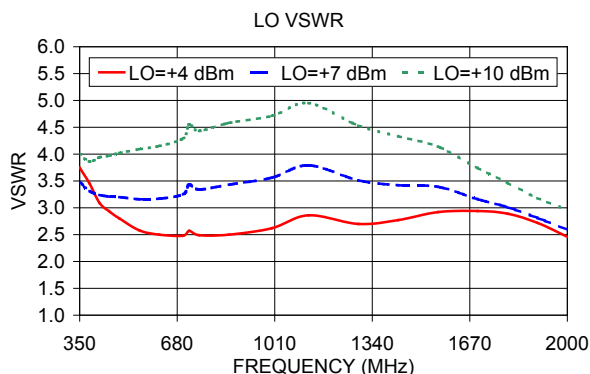
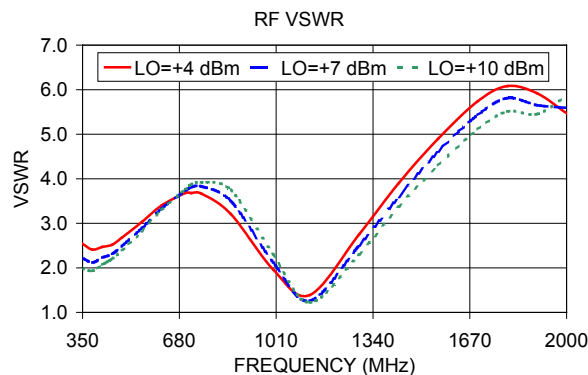
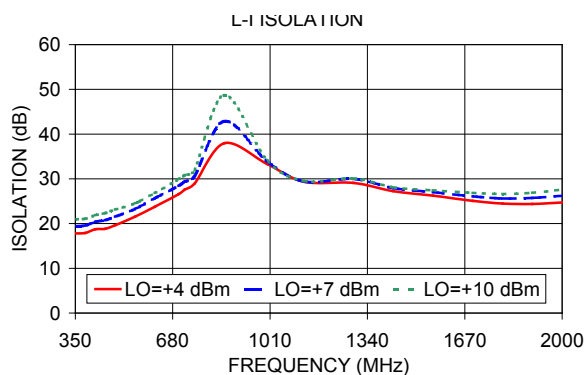
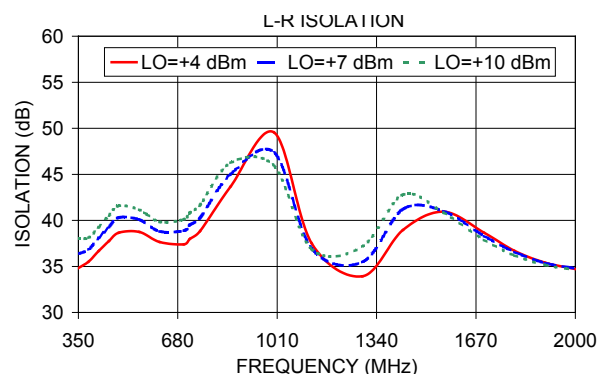
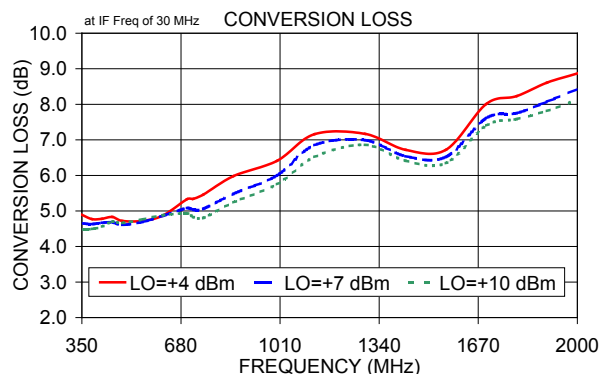
M = 750-1000 MHz U = 1000-2000 MHz

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
350.00	380.00	4.65	36.37	19.43	2.22
383.67	413.67	4.63	36.83	19.55	2.12
417.35	447.35	4.67	38.11	20.39	2.23
451.02	481.02	4.68	39.27	20.76	2.31
484.69	514.69	4.61	40.31	21.53	2.49
552.04	582.04	4.69	40.08	23.23	2.89
619.39	649.39	4.86	38.80	25.64	3.33
700.00	730.00	5.08	38.87	28.43	3.73
720.41	750.41	5.03	39.51	29.35	3.81
754.08	784.08	5.06	40.27	30.58	3.83
855.10	885.10	5.48	45.01	42.88	3.50
1000.00	1030.00	6.00	47.36	33.91	2.12
1124.49	1154.49	6.85	36.96	29.41	1.26
1292.86	1262.86	6.99	35.46	29.97	2.50
1427.55	1397.55	6.54	41.21	27.91	3.59
1562.24	1532.24	6.52	41.00	27.02	4.61
1696.94	1666.94	7.61	38.30	26.09	5.43
1797.96	1767.96	7.75	36.56	25.61	5.81
1898.98	1868.98	8.07	35.37	25.71	5.65
2000.00	1970.00	8.43	34.77	26.20	5.59

Electrical Schematic





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