

X3 Frequency Multiplier

50Ω

Output 6600 to 12000 MHz

RMK-3-123+



CASE STYLE: TT1224
PRICE: \$11.95 ea. QTY (10-49)

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Input Power	17 dBm
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

INPUT	1
OUTPUT	4
GROUND	2,3,5,6

Features

- broadband
- high rejection F2, -33 dBc typ.; F4, -45 dBc typ.
- low cost
- aqueous washable

Applications

- synthesizers
- local oscillators
- satellite up and down converters

Electrical Specifications

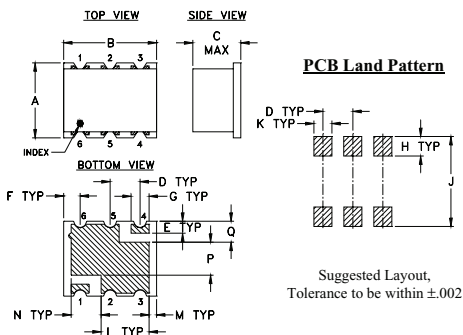
MULTIPLICATION FACTOR	FREQUENCY (MHz)		INPUT POWER (dBm)	CONVERSION LOSS (dB)	*HARMONIC OUTPUT (dB)		
	F1 Input	F3 Output			F1 Typ. Min.	F2 Typ. Min.	F4 Typ. Min.
3	2200-4000	6600-12000	13 17	15.5 21	5 -5	33 22	45 24

* Harmonics of input frequency below the power level of F3

Typical Performance Data

INPUT RF= 13 dBm					INPUT RF= 17 dBm			
Input Frequency (MHz)	Conversion Loss (dB)	Harmonic Output Below F3 (-dBc)			Conversion Loss (dB)	Harmonic Output Below F3 (-dBc)		
		F3	F1	F2		F3	F1	F2
2200.00	17.10	6.46	43.81	41.26	15.62	10.66	45.36	50.70
2400.00	14.76	7.47	42.53	40.96	14.11	10.86	44.54	52.89
2500.00	14.46	7.00	42.64	36.29	15.01	9.37	42.60	41.84
2700.00	14.39	6.21	41.67	46.46	14.73	8.74	43.18	50.24
2800.00	14.82	5.27	41.35	54.46	15.28	7.70	42.28	54.65
2900.00	15.15	4.65	41.77	62.55	15.56	7.05	40.84	53.91
3000.00	15.71	3.85	42.22	52.88	15.82	6.46	38.36	53.31
3100.00	15.33	3.81	40.33	45.93	15.53	6.25	35.03	51.83
3150.00	15.36	3.71	39.92	44.99	15.55	5.93	33.63	52.04
3240.00	15.22	3.51	37.49	43.68	15.53	5.65	31.88	51.49
3360.00	15.07	3.32	35.11	43.68	15.36	5.45	30.38	49.72
3430.00	14.88	3.22	33.83	43.88	15.58	5.07	30.14	47.92
3460.00	15.07	3.03	33.08	43.58	15.58	4.96	30.01	47.07
3520.00	15.17	2.71	31.33	43.53	15.86	4.48	28.99	45.90
3580.00	15.55	2.23	30.04	43.74	16.17	4.07	28.81	44.40
3640.00	15.82	1.77	29.35	44.29	16.43	3.58	29.12	43.44
3700.00	16.22	1.25	28.63	47.10	16.79	3.08	29.36	41.94
3820.00	17.26	-0.08	38.02	50.31	17.81	1.85	34.73	38.30
3880.00	17.64	-0.56	35.44	40.65	18.20	1.29	36.72	38.63
4000.00	18.82	-1.97	28.32	37.36	19.11	-0.09	30.37	41.63

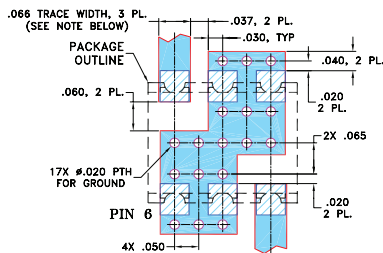
Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H
.25	.31	.16	.100	.040	.055	.060	.065
6.35	7.87	4.06	2.54	1.02	1.40	1.52	1.65
J	K	L	M	N	P	Q	wt.
.300	.060	.160	.025	.100	.110	.070	grams
7.62	1.52	4.06	0.64	2.54	2.79	1.78	0.16

Demo Board MCL P/N: TB-393 Suggested PCB Layout (PL-258)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Notes

- A. 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.
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www.minicircuits.com P.O. Box 35166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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