

X3 Frequency Multiplier

50Ω

Output 6600 to 12000 MHz

RMK-3-123+



CASE STYLE: TT1224

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

+RoHS Compliant

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

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

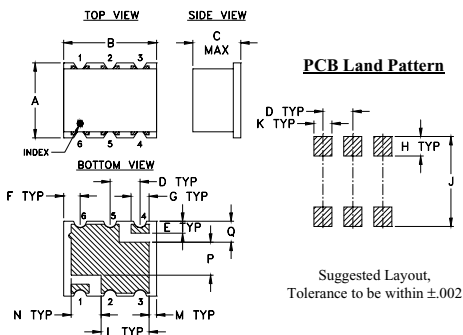
MULTIPLICATION FACTOR	FREQUENCY (MHz)		INPUT POWER (dBm)		CONVERSION LOSS (dB)	*HARMONIC OUTPUT (dB)		
	F1 Input	F3 Output	Min.	Max.		F1 Typ. Min.	F2 Typ. Min.	F4 Typ. Min.
3	2200-4000	6600-12000	13	17	15.5 21	5 -5	33 22	45 24

* 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	F4	F3		F1	F2	F4	
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		

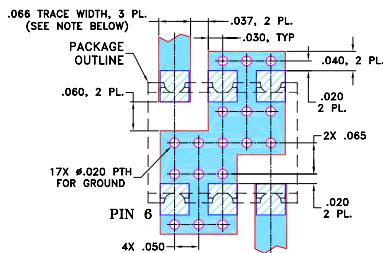
Outline Drawing



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.
B. 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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Page 1 of 1