

X3 Frequency Multiplier

RMK-3-14+

50Ω Output 6600 to 10005 MHz

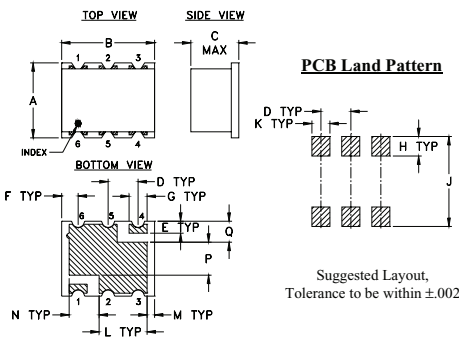
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Input Power	17 dBm

Pin Connections

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

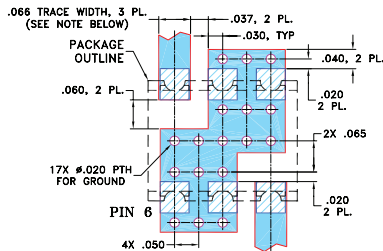
Outline Drawing



Outline Dimensions (inch/mm)

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

- 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.
- The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

Features

- broadband
- high rejection F2, -40 dBc typ.; F4, -37 dBc typ.
- low cost
- aqueous washable

Applications

- synthesizers
- local oscillators
- satellite up and down converters



Generic photo used for illustration purposes only
CASE STYLE: TT1224

+RoHS Compliant

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

Reel Size	Devices/Reel
7"	10, 20, 50, 100, 200
13"	500

Electrical Specifications

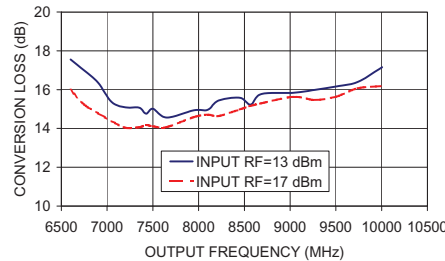
MULTIPLICATION FACTOR	FREQUENCY (MHz)		INPUT POWER (dBm)		CONVERSION LOSS (dB)		*HARMONIC OUTPUT (dBc)					
	F1 Input	F3 Output	Min.	Max.	Typ.	Max.	F1 Typ.	F2 Typ.	F4 Typ.			
3	2200-3335	6600-10005	13	17	14.5	19.5	6	-3	40	24	37	24

* Harmonics of input frequency below the power level of F3

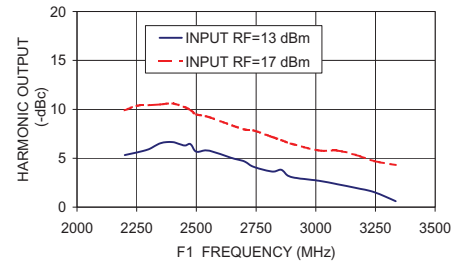
Typical Performance Data

Input Frequency (MHz)	INPUT RF= 13 dBm				INPUT RF= 17 dBm			
	Conversion Loss (dB)	Harmonic Output Below F3 (-dBc)			Conversion Loss (dB)	Harmonic Output Below F3 (-dBc)		
		F3	F1	F2		F4	F3	F1
2200.10	17.56	5.32	43.75	43.93	15.99	9.90	46.46	45.20
2250.10	16.99	5.59	42.88	44.04	15.23	10.36	45.57	47.62
2300.10	16.36	5.92	43.07	41.86	14.79	10.42	45.21	49.62
2350.10	15.36	6.54	44.24	41.67	14.38	10.50	45.15	52.71
2400.10	15.09	6.65	45.10	41.17	14.04	10.60	45.20	53.58
2450.10	15.07	6.31	45.17	41.50	14.06	10.24	44.93	53.05
2475.10	14.76	6.46	45.20	41.15	14.17	9.94	44.72	52.06
2500.10	15.01	5.66	44.70	40.70	14.11	9.49	44.23	51.31
2550.10	14.56	5.78	43.31	41.17	14.07	9.23	43.66	50.12
2650.10	14.94	5.02	42.27	36.21	14.59	8.36	42.85	41.98
2700.10	14.96	4.68	42.04	36.18	14.71	7.94	42.87	40.92
2739.10	15.44	4.13	42.28	34.37	14.64	7.84	43.35	38.63
2817.10	15.58	3.63	41.72	38.06	14.98	7.17	42.32	39.36
2856.10	15.23	3.81	42.18	38.39	15.16	6.85	42.10	37.45
2895.10	15.77	3.10	42.15	40.27	15.30	6.51	40.79	36.91
3012.10	15.84	2.71	42.56	58.96	15.63	5.80	37.81	48.47
3090.10	15.99	2.35	44.58	49.84	15.47	5.78	37.33	60.17
3168.10	16.16	1.96	46.81	46.38	15.64	5.34	36.86	48.04
3246.10	16.40	1.52	45.57	43.66	16.07	4.70	36.57	46.65
3335.10	17.16	0.61	43.37	43.19	16.18	4.30	35.69	46.98

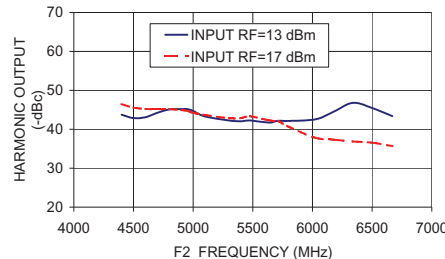
RMK-3-14+ CONVERSION LOSS



RMK-3-14+ HARMONIC OUTPUT F1



RMK-3-14+ HARMONIC OUTPUT F2



RMK-3-14+ HARMONIC OUTPUT F4

