

X5 Frequency Multiplier

RMK-5-472+

50Ω Output 3375 to 4750 MHz



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	Available Tape and Reel at no extra cost Devices/Reel
7"	10, 20, 50, 100, 200
13"	500

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Input Power	20 dBm

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

Features

- low conversion loss, 22 dB typ.
- high adjacent harmonic rejection, F4, -55 dBc typ., F6, 60 dBc typ.
- aqueous washable

Applications

- synthesizers
- local oscillators
- satellite up and down converters

Electrical Specifications at 25°C

Parameter	Min.	Typ.	Max.	Unit
Multiplier Factor		5		
Frequency Range, Input (F1)	675		950	MHz
Frequency Range, Output (F5)	3375		4750	MHz
Input Power	10	—	15	dBm
Conversion Loss	—	22	26.5	dB
Harmonic Output*	F1	-3	4	—
	F2	40	60	—
	F3	-8	0	—
	F4	40	55	—
	F6	40	60	—
	F7	0	5	—

* Harmonics of input frequency below the power level of F5

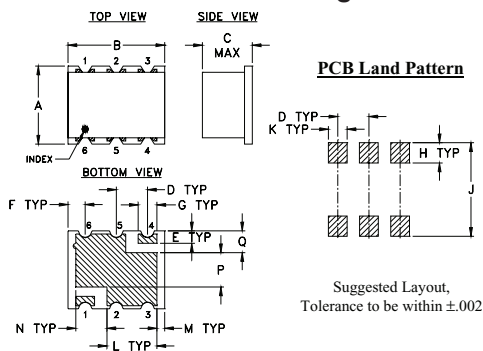
Typical Performance Data

Frequency Input (MHz)	Output (MHz)	Conv. Loss (dB) F5	Harmonic Rejection Below F5 (dBc) at RF Input Power 10 dBm					
			F1	F2	F3	F4	F6	F7
675	3375	22.65	8.67	65.80	2.14	56.28	59.68	8.06
700	3500	22.56	8.18	64.45	1.57	54.80	58.58	10.02
725	3625	22.39	7.67	67.46	1.04	58.07	64.28	11.24
750	3750	22.22	7.28	66.36	0.64	57.14	64.54	12.62
775	3875	22.02	6.90	65.86	0.19	56.94	66.06	13.65
800	4000	22.03	6.43	65.28	-0.66	56.72	67.50	14.70
825	4125	22.16	5.72	64.71	-1.36	56.48	69.52	14.86
850	4250	22.17	5.26	64.07	-2.07	56.09	71.27	14.80
875	4375	22.51	4.42	62.51	-2.96	55.70	75.31	15.00
900	4500	22.84	3.60	61.27	-3.93	55.20	79.85	13.74
925	4625	23.07	2.89	59.77	-4.66	54.44	83.09	9.54
950	4750	23.83	1.69	57.92	-5.80	53.56	82.63	11.69

at RF Input Power 15 dBm

675	3375	23.46	11.30	64.84	5.10	56.19	54.87	4.85
700	3500	23.06	11.09	63.82	4.84	54.76	54.22	5.99
725	3625	22.57	10.90	67.78	4.47	59.20	63.77	7.21
750	3750	22.40	10.44	66.20	4.32	57.68	63.12	8.31
775	3875	22.26	10.02	65.58	3.86	57.36	66.03	8.44
800	4000	22.54	9.30	64.75	2.98	56.85	66.67	9.12
825	4125	22.14	9.06	64.85	2.46	56.91	69.93	8.92
850	4250	22.37	8.40	64.49	1.63	56.57	73.03	8.18
875	4375	22.35	7.85	63.64	0.84	56.65	72.66	8.62
900	4500	22.53	7.22	62.87	-0.18	56.48	71.92	7.25
925	4625	22.93	6.37	61.61	-1.03	55.74	71.85	7.71
950	4750	23.66	5.19	60.02	-1.89	54.90	69.13	7.64

Outline Drawing

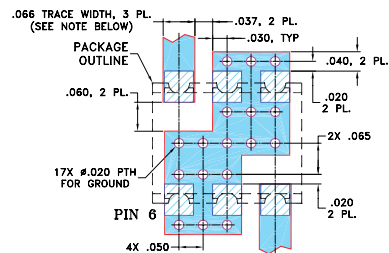


Outline Dimensions (inch)

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

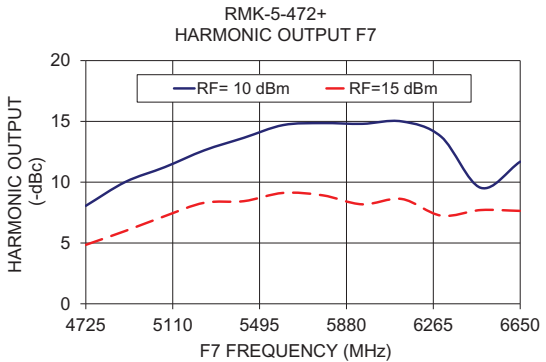
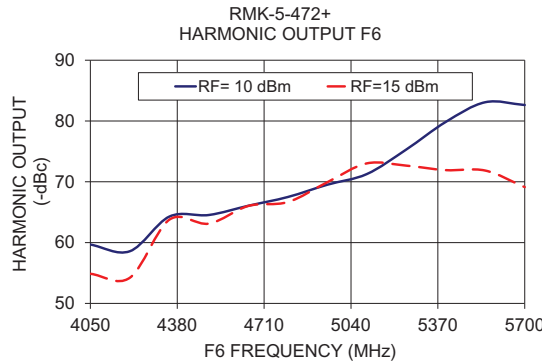
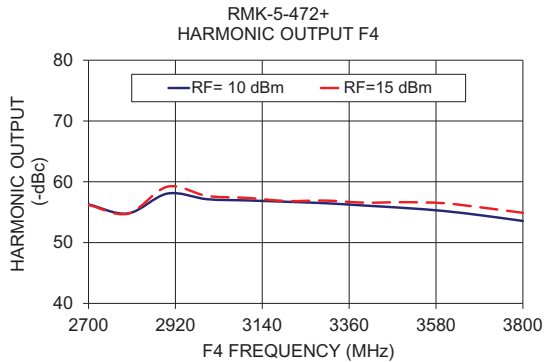
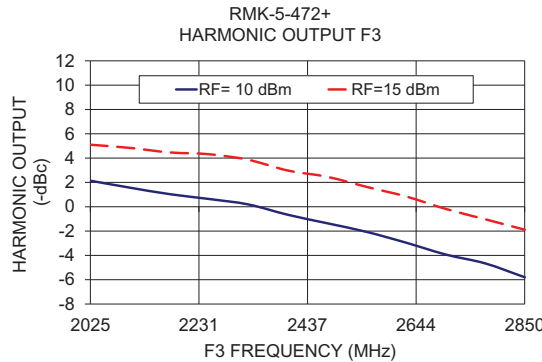
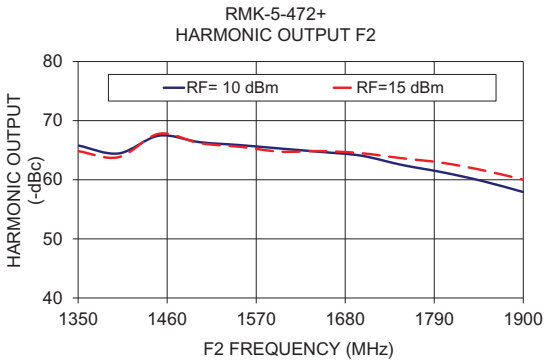
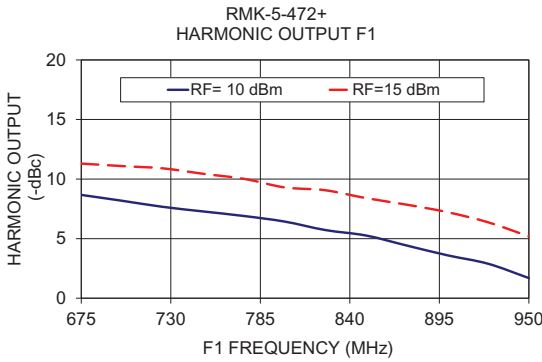
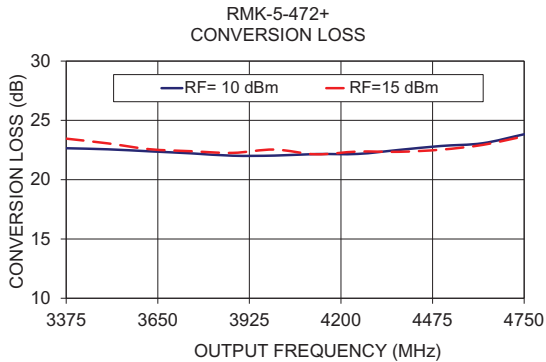
Suggested PCB Layout (PL-258)



Notes

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