

X2 Frequency Multiplier

RK-2+

50Ω Output 10 to 1000 MHz



Generic photo used for illustration purposes only

CASE STYLE: A01

+RoHS Compliant

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

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Input Power	200mW

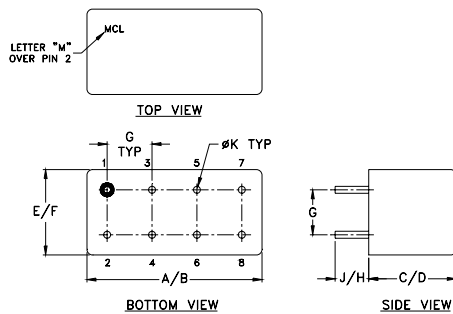
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

INPUT	1,3,4 [^]
OUTPUT	8
GROUND	2,5,6,7
CASE GROUND	2,5,6,7

[^] pins must be connected together externally

Outline Drawing



Outline Dimensions (Inch/mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

Features

- wideband, 10 to 1000 MHz
- low conversion loss, 13.5 dB typ.
- hermetic case

Applications

- synthesizers
- local oscillators
- military, hi-rel applications

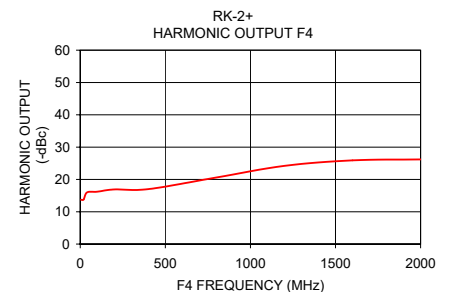
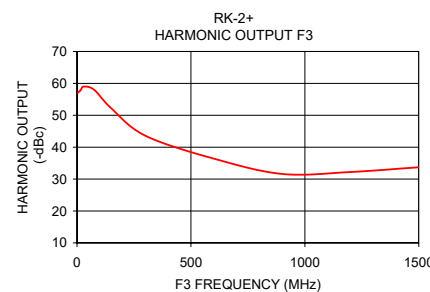
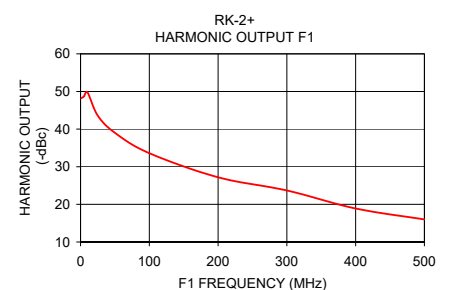
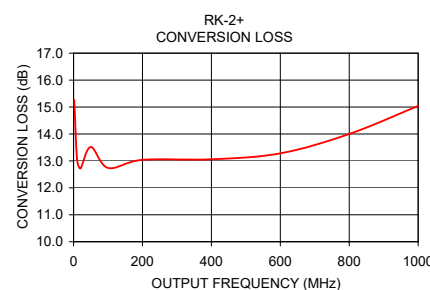
Electrical Specifications

MULTIPLICATION FACTOR	FREQUENCY (MHz)		INPUT POWER (dBm)		CONVERSION LOSS (dB)		*HARMONIC OUTPUT (dBc)					
	F1 Input	F2 Output	Min.	Max.	Typ.	Max.	F1		F3		F4	
							Typ.	Min.	Typ.	Min.	Typ.	Min.
2	5-100	10-200	1	15	13	16	40	30	50	40	16	12
	100-300	200-600	1	15	13.5	15.5	25	20	40	30	16	12
	300-500	600-1000	1	15	14.0	16.5	20	15	30	25	16	12

* Harmonics of input frequency below the power level of F2

Typical Performance Data

Input Frequency (MHz)	Conversion Loss (dB) F2	F1	Harmonic Output (-dBc) F3	F4
1.00	15.26	48.20	57.00	13.70
5.00	13.06	48.70	57.80	13.80
10.00	12.72	49.80	59.00	16.00
25.00	13.52	43.60	58.00	16.20
50.00	12.74	39.00	52.20	16.90
100.00	13.04	33.60	43.60	17.00
200.00	13.06	27.20	36.40	20.60
300.00	13.28	23.70	31.60	24.20
400.00	14.00	18.90	32.20	25.90
500.00	15.04	16.00	33.70	26.20



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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