X2 Frequency Multiplier

50Ω Output 2 to 1000 MHz

SK-2+

CASE STYLE: B02
PRICE: $31.20 ea. QTY (1-9)

+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	1,2^
OUTPUT	4
GROUND EXT.	3
CASE GROUND	3

^ pins must be connected together externally

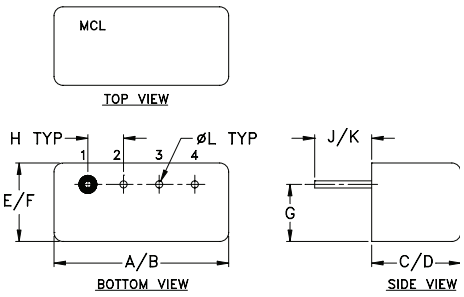
Features

- wideband, 2 to 1000 MHz
- low conversion loss, 13.5 dB typ.

Applications

- synthesizers
- local oscillators

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F
.480	.500	.240	.255	.210	.230
12.19	12.70	6.10	6.48	5.33	5.84
G	**H**	**J**	**K**	**L**	**wt**
.16	.100	.14	.20	.020	grams
4.06	2.54	3.56	5.08	0.51	1.9

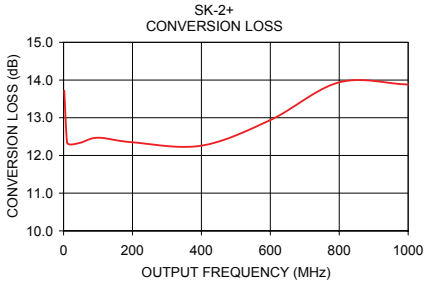
Electrical Specifications

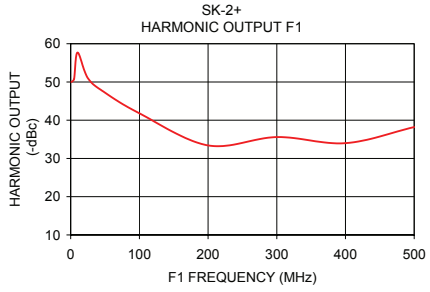
MULTIPLICATION FACTOR	FREQUENCY (MHz) F1 Input	FREQUENCY (MHz) F2 Output	INPUT POWER (dBm) Min.	INPUT POWER (dBm) Max.	CONVERSION LOSS (dB) Typ.	CONVERSION LOSS (dB) Max.	*HARMONIC OUTPUT (dBc) F1 Typ.	F1 Min.	F3 Typ.	F3 Min.	F4 Typ.	F4 Min.
2	1-100	2-200	1	10	13.0	15.0	40	30	50	40	16	12
	100-300	200-600	1	10	13.5	15.5	25	20	40	30	16	12
	300-500	600-1000	1	10	14.0	16.0	20	15	30	25	16	12

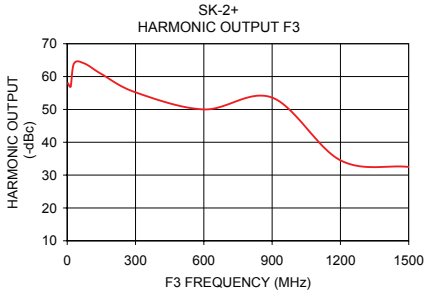
* Harmonics of input frequency below the power level of F2

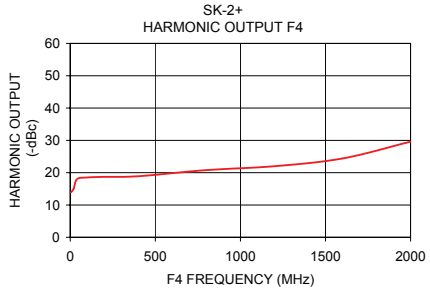
Typical Performance Data

Input Frequency (MHz)	Conversion Loss (dB) F2	Harmonic Output (-dBc) F1	F3	F4
1.00	13.72	50.00	58.00	13.90
5.00	12.35	50.80	57.00	15.00
10.00	12.29	57.70	64.00	18.00
25.00	12.34	51.00	64.00	18.50
50.00	12.47	47.20	60.80	18.70
100.00	12.35	41.80	55.20	18.90
200.00	12.26	33.40	50.00	20.80
300.00	12.94	35.60	53.60	22.00
400.00	13.94	34.00	34.50	24.40
500.00	13.88	38.20	32.50	29.60









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.
C. The parts covered by this specification document are subject to Mini-Circuits 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-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp