

X2 Frequency Multiplier

50Ω Output 140 to 3000 MHz

LK-3000+



CASE STYLE: BB48

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	4
OUTPUT	8
GROUND	1,2,3,5,6,7
CASE GROUND	1,2,3,5,6,7

Features

- wideband, 140 to 3000 MHz
- low conversion loss, 11 dB typ.
- drop-in flat pack

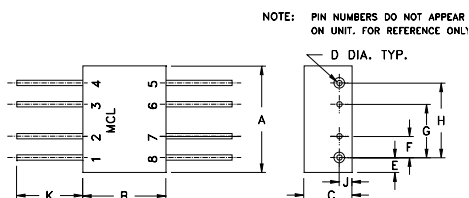
Applications

- synthesizers
- local oscillators

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F
.50	.39	.225	.025	.07	.100
12.70	9.91	5.72	0.64	1.78	2.54
G	H	J	K		wt
.250	.350	.06	.31		grams
6.35	8.89	1.52	7.87		3.0

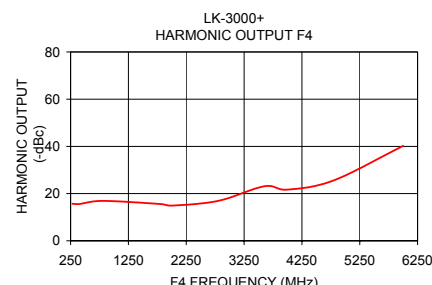
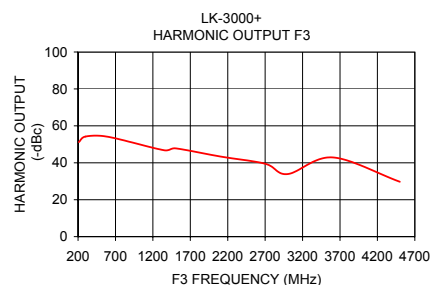
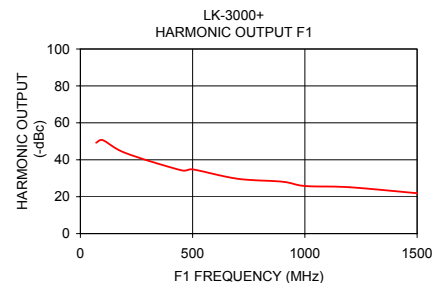
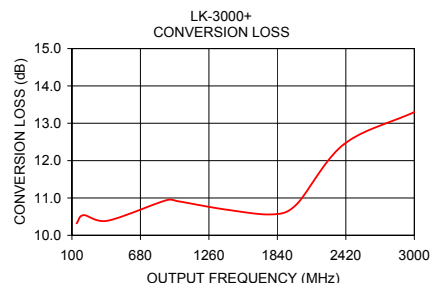
Electrical Specifications

MULTIPLICATION FACTOR	FREQUENCY (MHz)		INPUT POWER (dBm)		CONVERSION LOSS (dB)		*HARMONIC OUTPUT (dBc)					
	F1	F2	Min.	Max.	Typ.	Max.	F1		F3		F4	
	Input	Output					Typ.	Min.	Typ.	Min.	Typ.	Min.
2	70-1000	140-2000	12	15	10.5	14.0	31	20	40	25	15	10
	1000-1500	2000-3000	12	15	11.5	16.0	22	15	35	20	20	14

* Harmonics of input frequency below the power level of F2

Typical Performance Data

Input Frequency (MHz)	Conversion Loss (dB)	Harmonic Output (-dBc)		
		F1	F3	F4
70.00	10.32	49.20	51.20	15.70
100.00	10.54	50.60	54.20	15.60
200.00	10.39	43.70	54.10	16.90
450.00	10.94	34.30	46.80	15.60
500.00	10.91	34.80	47.80	14.90
700.00	10.69	29.70	43.40	16.90
900.00	10.56	28.10	39.50	23.10
1000.00	10.82	25.80	33.90	21.70
1200.00	12.43	25.10	42.90	25.60
1500.00	13.30	21.90	29.70	40.20



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-Circuits' applicable established test performance criteria and measurement instructions.
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