

# X2 Frequency Multiplier

50Ω Output 0.1 to 300 MHz

## MK-3



CASE STYLE: L19

### 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.

### Features

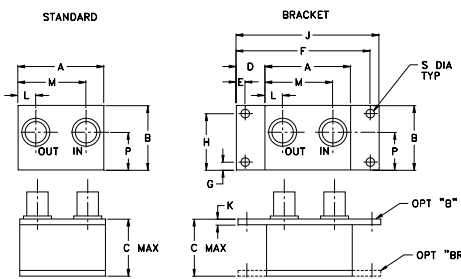
- low insertion loss, 11 dB typ.
- rugged shielded case

### Applications

- synthesizers
- local oscillators

Connectors	Model
SMA	MK-3
BRACKET (OPTION "B")	
BRACKET (OPTION "BR")	

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.50	1.13	1.00	.50	.155	2.345	.138	.987
38.10	28.70	25.40	12.70	3.94	59.56	3.51	25.07

J	K	L	M	N	P	S	wt
2.50	.10	.31	1.19	--	.66	.150	grams
63.50	2.54	7.87	30.23	--	16.76	3.81	37.0

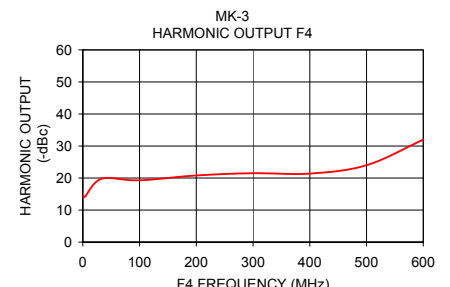
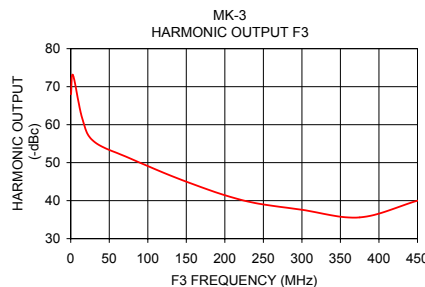
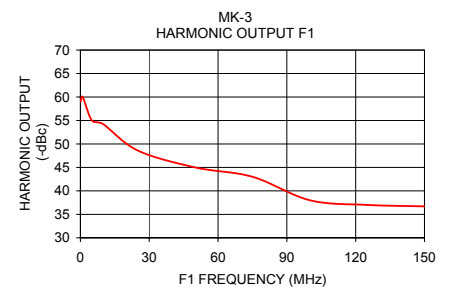
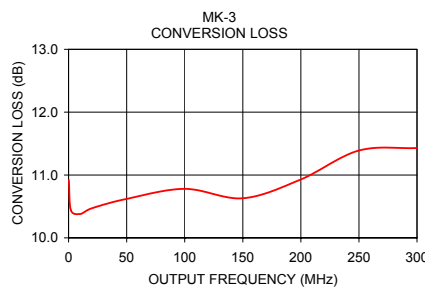
### Electrical Specifications

MULTIPLICATION FACTOR	FREQUENCY (MHz)		INPUT POWER (dBm)		CONVERSION LOSS (dB)		*HARMONIC OUTPUT (dBc)					
	F1	F2					F1		F3		F4	
	Input	Output	Min.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.
2	0.05-50	0.1-100	0	13	11.0	17.0	40	28	45	30	16	12
	50-150	100-300	0	13	11.5	15.0	35	20	40	20	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
0.10	10.92	59.00	68.00	14.40
1.00	10.44	60.00	73.00	14.20
5.00	10.38	55.00	61.60	18.20
10.00	10.47	54.20	55.60	20.00
25.00	10.62	48.60	51.30	19.30
50.00	10.78	45.00	45.00	20.80
75.00	10.63	43.00	40.00	21.50
100.00	10.93	38.00	37.60	21.40
125.00	11.39	37.00	35.60	24.00
150.00	11.43	36.70	40.00	32.00



### 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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