

X2 Frequency Multiplier

50Ω Output 140 to 3000 MHz

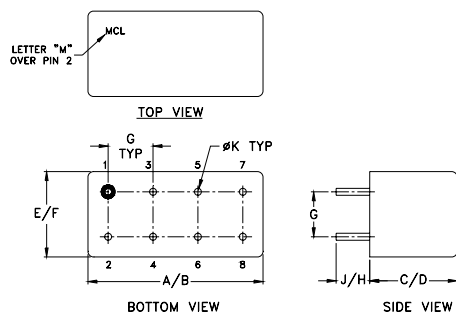
Maximum Ratings

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

Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F
.480	.500	.390	.405	.210	.230
12.19	12.70	9.91	10.29	5.33	5.84

G	H	J	K	wt
.100	.20	.14	.020	grams
2.54	5.08	3.56	0.51	2.3

Features

- wideband, 140 to 3000 MHz
- low conversion loss, 11 dB typ.
- hermetic case

Applications

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



CASE STYLE: A03

+RoHS Compliant

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

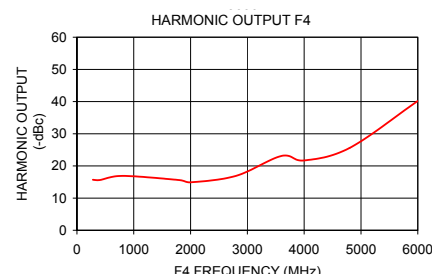
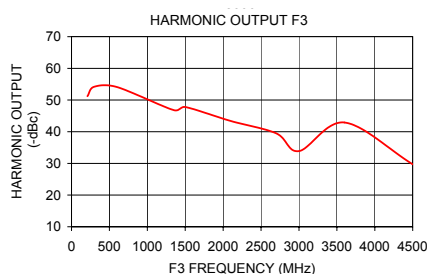
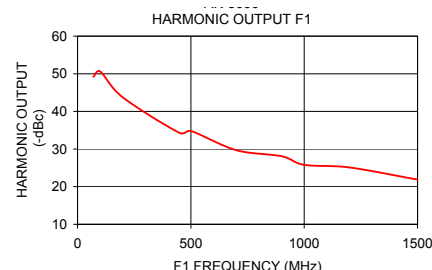
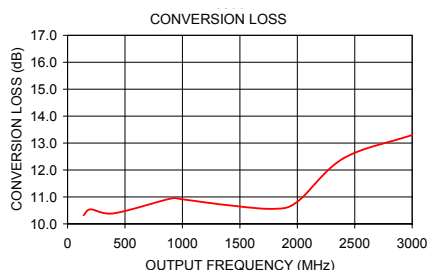
Electrical Specifications

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.	Typ. Min.	Typ. Min.	Typ. Min.
2	70-1000	140-2000	12	15	10.5	14.0	31	20	40	25	14	10
	1000-1500	2000-3000	12	15	11.5	16.0	22	15	30	20	30	14

* Harmonics of input frequency below the power level of F2

Typical Performance Data

Input Frequency (MHz)	Conversion Loss (dB) F2	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-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

