

# X2 Frequency Multiplier

50Ω Output 20 to 2000 MHz

## FK-5



### 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

- wideband, 20 to 2000 MHz
- low insertion loss, 13 dB typ.
- rugged shielded case

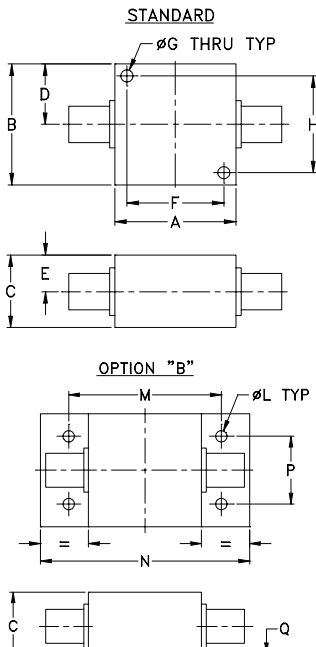
### Applications

- synthesizers
- local oscillators

CASE STYLE: H16

Connectors	Model	Price	Qty.
BNC	FK-5	\$69.95	(1-9)
N-TYPE	FK-5-N	\$74.95	(1-9)
SMA	FK-5-S	\$74.95	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)

### Outline Drawing



### Outline Dimensions (inch)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.000	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40
J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.750	.06	grams
--	--	3.18	42.88	55.37	19.05	1.52	70.0

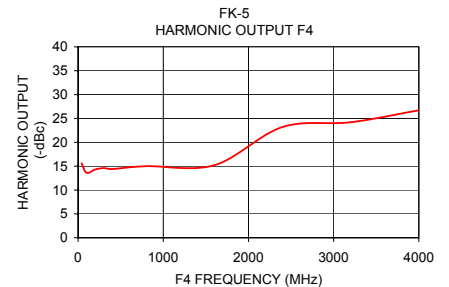
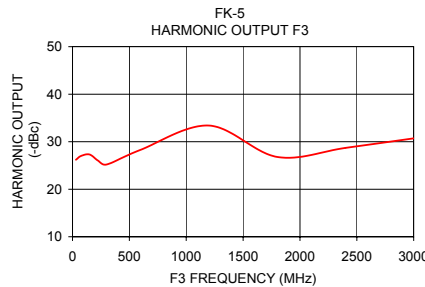
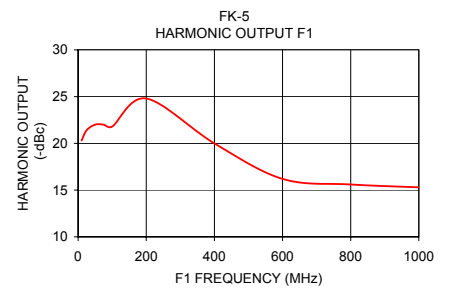
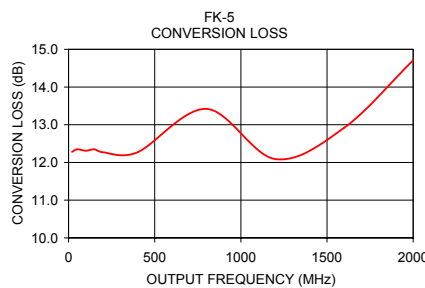
### Electrical Specifications

MULTIPLICATION FACTOR	FREQUENCY (MHz)		INPUT POWER (dBm)		CONVERSION LOSS (dB)		*HARMONIC OUTPUT (dBc)					
	F1 Input	F2 Output	Min.	Max.	Typ.	Max.	F1		F3		F4	
2	10-600	20-1200	10**	20	13.0	15.0	20	10	16	20	15	10
	600-1000	1200-2000	10**	20	14.0	17.0	20	10	25	20	25	15

\* Harmonics of input frequency below the power level of F2  
 \*\* Minimum input power +13 dBm above 700 MHz.

### Typical Performance Data

Input Frequency (MHz)	Conversion Loss (dB) F2	F1	Harmonic Output (-dBc) F3	F4
10.00	12.28	20.30	26.20	15.60
25.00	12.35	21.40	27.00	13.60
50.00	12.31	22.00	27.30	14.30
75.00	12.35	22.00	26.00	14.60
100.00	12.27	21.80	25.20	14.40
200.00	12.27	24.80	28.30	15.00
400.00	13.42	20.00	33.40	15.20
600.00	12.09	16.20	26.80	23.20
800.00	12.92	15.60	28.70	24.20
1000.00	14.71	15.30	30.70	26.70



### 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.
- 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](http://www.minicircuits.com/MCLStore/terms.jsp)

