

X2 Frequency Multiplier

50Ω Output 10 to 1000 MHz

FD-2+



Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Input Power*	200mW

* Input is at Male BNC

Permanent damage may occur if any of these limits are exceeded.

Features

- wideband, 10 to 1000 MHz
- low conversion loss, 13.5 dB typ.
- rugged shielded case

Applications

- synthesizers
- local oscillators

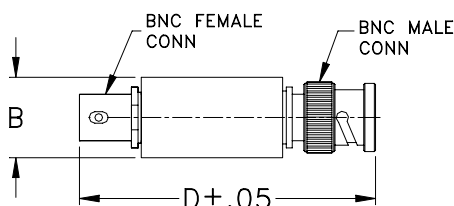
CASE STYLE: FF55

Connectors	Model
BNC	FD-2+

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch)

B	D	wt
.54	2.59	grams
13.72	65.79	40.0

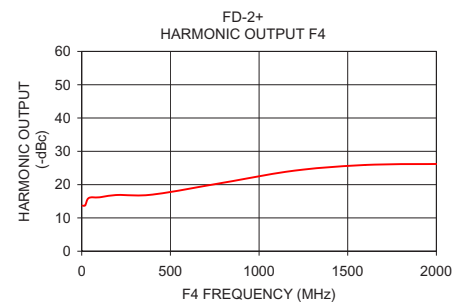
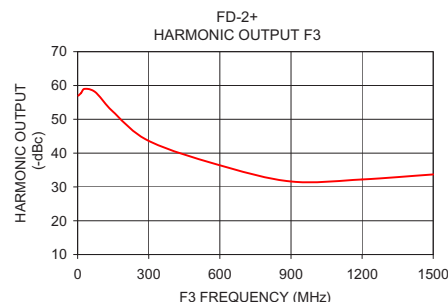
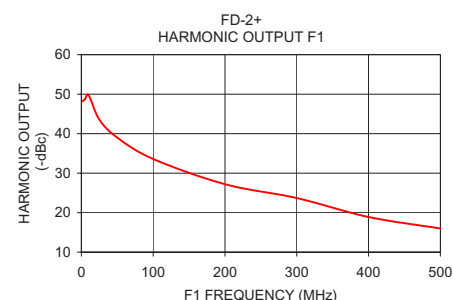
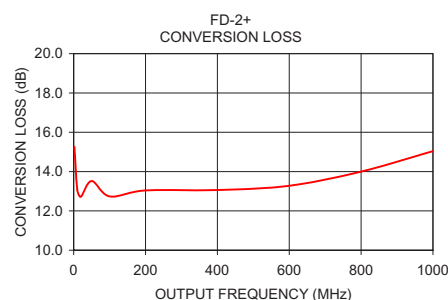
Electrical Specifications

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.	Typ. Min.	Typ. Min.	Typ. Min.
2	5-100	10-200	1	15	13.0	16.0	40	30	50	40	16	12
	100-300	200-600	1	15	13.5	15.5	25	20	40	30	16	12
	300-500	600-1000	1	15	14.0	16.5	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	15.26	48.20	57.00	13.70	
5.00	13.06	48.70	57.80	13.80	
10.00	12.72	49.80	59.00	16.00	
25.00	13.52	43.60	58.00	16.20	
50.00	12.74	39.00	52.20	16.90	
100.00	13.04	33.60	43.60	17.00	
200.00	13.06	27.20	36.40	20.60	
300.00	13.28	23.70	31.60	24.20	
400.00	14.00	18.90	32.20	25.90	
500.00	15.04	16.00	33.70	26.20	



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



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. D
M151107
FD-2+
AD/CP/AM
150806
Page 1 of 1