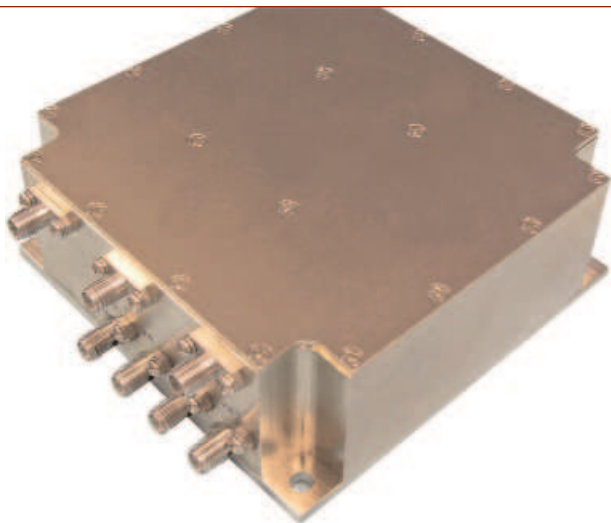


# Frequency Multiplier (x4, x8)

Model BXMF1010 (450 - 500 MHz)



## Features

- Low Additive Phase Noise:  
-146 dBc/Hz @ 1 kHz Offset (x8)
- Excellent Harmonic Performance: -50 dBc
- Low Discrete Spurious: -75 dBc
- High Reliability: 200,000 Hr MTBF
- Low Harmonic & Sub-Harmonic Content:  
-60 dBc

## Description

Spectrum Microwave offers a line of low noise frequency multipliers based on multiple passive doubler/amplifier combinations. This series of multipliers cover input frequency ranges of 450 to 500 MHz with output frequencies from 1800 to 4000 MHz. Additive phase noise testing ensures low phase noise/jitter performance. All internal amplifiers and doublers are contained in rugged TO-8 hermetic packages for excellent performance over military environmental conditions.

## Optional Features

- Output Filtering
- Digital ECL Outputs (Single or Differential)
- Built-in Test Power Detectors
- Internal Voltage Regulators

## Applications

- Synthesizer Building Block
- SIGINT
- ELINT
- EW

## Typical Specifications

Input Frequency	450 to 500 MHz
Input Level	+10 dBm
Output Frequency x4	1800 to 2000 MHz
Output Frequency x8	3600 to 4000 MHz
Power Input	+10 dBm
Output Level	+3 dBm
Bandwidth	1%
Switching Speed	90 nsec
Harmonics	-50 dBc
Sub-Harminics	-70 dBc
ECL Differential Delay	100 psec
Phase Noise	-146 dBc/Hz @ 1 kHz
(Ref. to input)	-158 dBc/Hz @ 10 kHz
	-158 dBc/Hz @ 100 kHz
DC Power	+15 V @ 250 mA
	+5 V @ 60 mA
Temp Range	0°C to +70°C

*All specifications above typical, measured at 25 °C*

## Dimensions and Connections

4.5" L x 4.5" W x 1.5" H

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