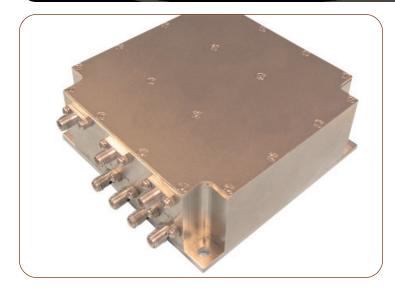
# Frequency Multiplier (x4, x8)

## Model BXMF1004 (150 - 200 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 150 to 200 MHz with output frequencies from 600 to 1600 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** 150 to 200 MHz

Input Level +10 dBm

Output Frequency x4 600 to 800 MHz Output Frequency x8 1200 to 1600 MHz

**Power Input** +10 dBm **Output Level** +3 dBm 1% Bandwidth

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

+15 V @ 250 mA

**DC Power** 

+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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