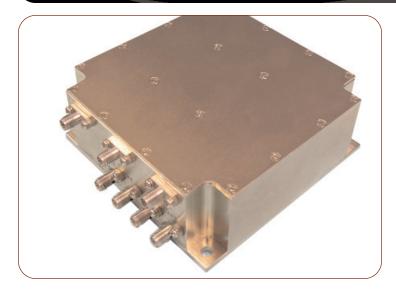
Frequency Multiplier (x4, x8)

Model BXMF1003 (100 - 150 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 100 to 150 MHz with output frequencies from 400 to 1200 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 100 to 150 MHz

Input Level +10 dBm

Output Frequency x4 400 to 600 MHz Output Frequency x8 800 to 1200 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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