Typical Applications

Satellite Communications Military

Features

Surface Mount High Reliability

Designed to Withstand 50 Krads Total Dose (Optional to 100 Krads Total Dose)

CMOS

5 ns max.

5 ns max.

+ 0.5 V max.

+ 4.0 V min.

Meas. 10% to 90%

40/60% @ 50% level

10 MHz - 75 MHz Frequency

Parameters

Logic "1"

Output TTL Rise and Fall Time: Meas. 0.8 V & 2.0 V 10 MHz to 20 MHz 15 ns max. 20 MHz to 75 MHz 5 ns max. 40/60% @ 1.4 V level **Duty Cycle:** Logic "0" + 0.5 V max.

Load: As defined by MIL-PRF-55310

Temperature Stability: \pm 2 to \pm 4 ppm max. typical over -40° to +85°C \pm 5 to \pm 10 ppm max. typical over -55° to +105°C

+ 2.4 V min.

Aging: \pm 1 to \pm 2 ppm/year depending on frequency Calibration (factory): ± 4 ppm @ 25°C (if EFC is not specified)

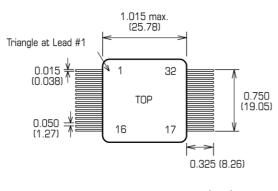
Electrical Frequency Adjustment: \pm 5 ppm min.

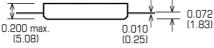
(when specified)

Screening: Class B or Class S

Random Vibration: 50 g typical **Environmental:** Shock: 1500 g, 0.5 msec. typical ± 1 x 10⁻⁹ per second typical Short Term Stability:

Enclosure





Dimensions: Inches (mm)

Typical Phase Noise @ 10 MHz

1Hz Offset - 55 dBc / Hz 10Hz Offset -85 dBc / Hz 100Hz Offset -115 dBc / Hz 1kHz Offset -135dBc / Hz 10kHz Offset -145dBc / Hz 100kHz Offset -145dBc / Hz

PIN CONNECTIONS

4 – Ext. Freq. Adj. (when specified).

or N/C

– GND/Case

11 - Supply Voltage

12 - RF Output

13 - Supply Voltage

Notes: Leads 11 and 13 are connected internally; either or both may be used.

Optional lead forming available for surface mounting. ¹External Frequency Adjustment is required for calibration @ +25°C for frequency stability specifications of < ±4 ppm.