

## SPECIAL FEATURES

- **Pin Mount Package:** < 0.7 cubic inches
- **Low Spurious:** > - 80 dBc
- **Low Vibration Sensitivity:** <  $2.5 \times 10^{-9}/g$ , typical



This miniature ovenized VCXO utilizes a specially mounted AT-cut crystal which helps determine the unit's excellent spurious and low vibration sensitivity levels. This unit is practically spur free at offsets under 45 kHz and has typical vibration sensitivity as low as  $2.5 \times 10^{-9}/g$ .

The oscillator design is optimized for operation over a tough environment, including - 54 to + 85 °C baseplate temperature and vibration levels up to 0.02  $g^2/Hz$  (100-300 Hz) per MIL-STD-202, Method 214. Construction employs thin film circuitry in a pin mount, laser sealed package.

## ELECTRICAL SPECIFICATIONS

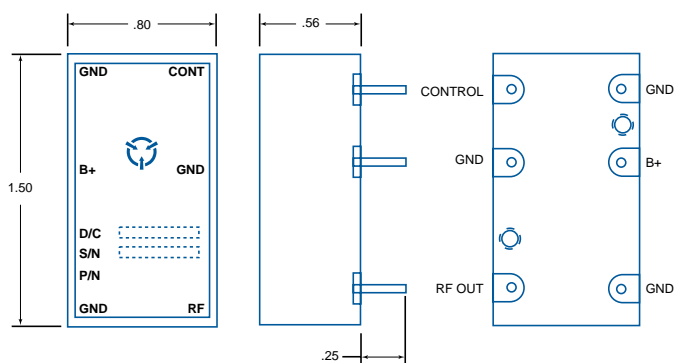
Operating Frequency:	150 MHz <sup>Note 1</sup>
Electrical Tuning Range:	$\pm 30$ kHz (200 ppm)
Tuning Voltage Range:	$\pm 5$ V
Frequency Settling Time:	300 $\mu$ sec to within 10 Hz of the final value for a 5 V change
Temperature Stability:	less than 0.625 Hz/sec after warm-up
Warm Up Time:	less than 3 minutes from - 32 °C
Output Power:	+ 10 dBm $\pm 1$ dB, typical
SSB Phase Noise (dBc/Hz, typical):	
offset	
10 Hz	- 60
100 Hz	- 92
1 kHz	- 120
10 kHz	- 142
Spurious:	- 80 dBc, maximum @ offsets < 10 MHz - 60 dBc, maximum @ offsets $\geq 10$ MHz
Harmonics:	- 50 dBc, typical
Output VSWR:	2.0:1 maximum
Frequency Pulling:	0.3 kHz, typical; 2 kHz, maximum <sup>Note 2</sup>
Frequency Pushing:	< 0.1 kHz/V, typical; 2 kHz/V, maximum <sup>Note 2</sup>
Vibration Sensitivity:	$2.5 \times 10^{-9}/g$ , typical; $5 \times 10^{-9}/g$ , maximum
DC Power:	+ 15 V $\pm 10\%$ @ 100 mA, nominal
Power Consumption:	1.5 W, nominal

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	- 54 to + 85 °C, baseplate
Environment:	Airborne

## MECHANICAL SPECIFICATIONS

Size (excluding pins):	1.5 x 0.8 x 0.56 inches 38 x 20 x 14 mm
Weight:	0.73 oz (20.7 g), nominal
DC & RF Connectors:	Pins



Note 1: Other operating frequencies are available.

Note 2: Pushing and pulling requirements are referenced to 10 dB return loss at all phases.

Specifications subject to change without notice.