PX-209

Hi-Reliability Crystal Oscillator

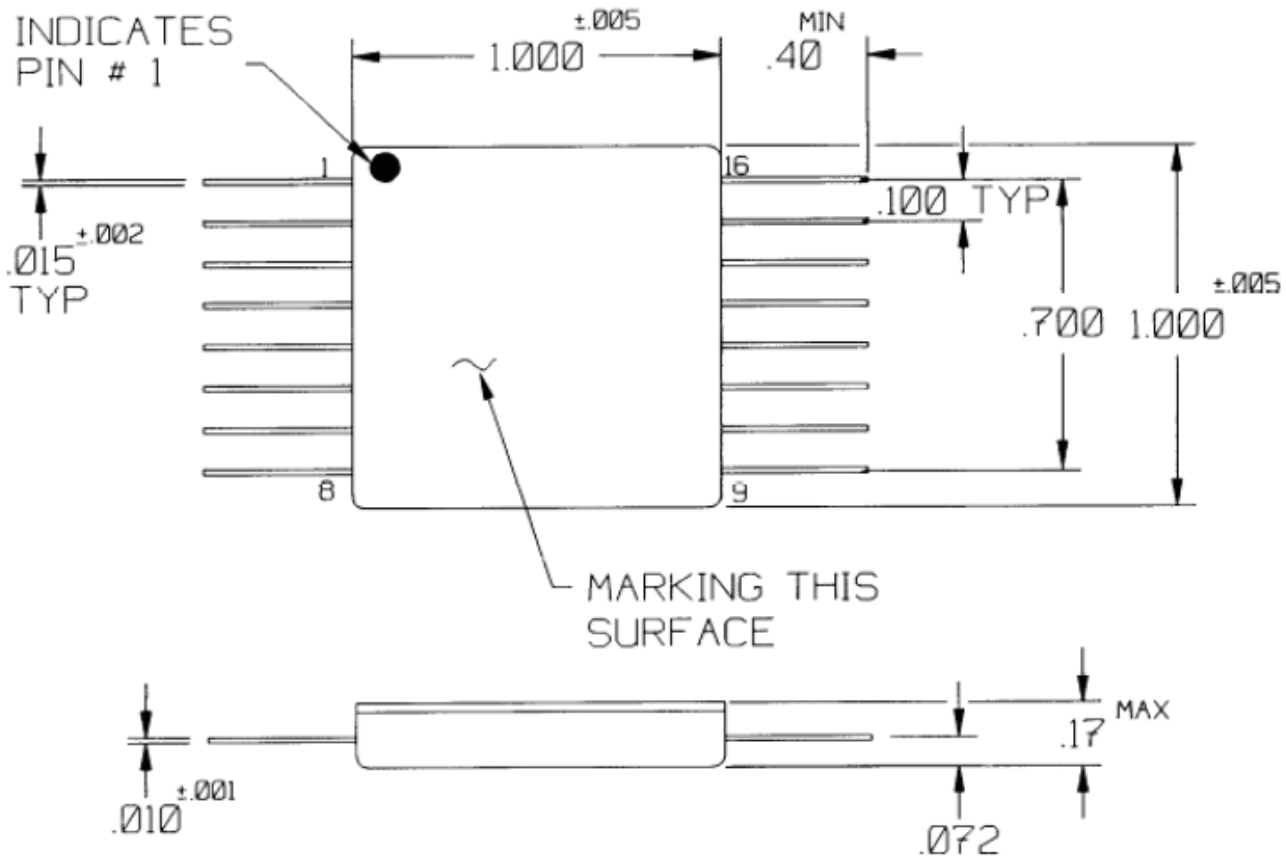
Performance Specifications

Parameter	Min	Typ	Max	Units	Condition
Frequency Stabilities[1]					
vs. operating temperature range (referenced to +25°C)	-50		+50	ppm	-55… +125°C
Initial Accuracy	-15		+15	ppm	@ +25°C
Supply	-4		+4	ppm	Vs +/-5%
Load	-0.5		+0.5	ppm	+/- 10%
vs. aging / 1 year vs. aging / 15 years	-5 -15		+5 +15	ppm ppm	
Supply Voltage (Vs)					
Supply voltage	11.40	12.00	12.60	VDC	
Power consumption			50	mA	
RF Output					
Signal	Sinewave				
Output Power	0 +7			dBm dBm	50 Ohm load 50 Ohm load
Harmonics Sub-Harmonics Spurious			-20 -30 -80	dBc dBc dBc	Met by design, not tested

Additional Parameters

Parameter	Condition
Crystal	Swept quartz, AT, 4 point mount
Components	Class "S" Microelectronic element evaluation per Appendix B of MIL-PRF-55310
Radiation	Active die are of bi-polar technology inherently radiation tolerant. If required, VI will provide a parts list and schematic (NDA required) for review of radiation hardness.
Shock and Vibration (met by design, not tested)	Shock: 100G, 6 ms per MIL-STD-202, Method 213, Condition C Sine Vibration: 20G to 2 kHz per MIL-STD-202, Method 204, Condition D Random Vibration: 20 Grms overall to 2 kHz per MIL-STD-202, Method 214, Condition I-F

Outline Drawing / Enclosure



Pin Connections	
8	Ground (Case)
9	RF Output
11	RF Return (Case)
16	Supply
others	Do Not Use (may be used internally)

Ordering Information

PX - 209 0 - B E C - D K S 1 - 300M000000

- **Product Family**
  PX: PXO
- **Package**
  209: 25 x 25 mm
- **Height**
  0: 0.17"
- **Supply Voltage**
  B: 12 Vdc
- **RF Output Code**
  E: Sinewave
- **Temperature Range**
  C: -55°C to +125°C
- **Accuracy Code**
  D: ±15 ppm
- **Temp. Stability Code**
  K: ±50 ppm
- **Screening Option**
  E: Engineering Model
  K: Class K Screening IAW MIL-PRF-38534
  S: Class S Screening IAW MIL-PRF-55310
- **Platform Code**
  Output Power
  0: 0 dBm
  1: +7 dBm
- **Frequency**

Notes:

1. Unless otherwise stated, all values are valid after warm-up time and refer to typical conditions for supply voltage, load, and operating temperature. Contact factory for improved stabilities or additional product options.
2. Engineering models are fit, form and function representative of Flight Models and utilize unscreened COTS components of same generic type as Flight Models. Completed oscillators are not screened, will not contain swept quartz, and are not suitable for flight, DPA, or RGA.

For Additional Information, Please Contact

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