PX-570 High Temperature Electronics

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Vectron offers a High Temperature Crystal Oscillator (PX-570) product platform for extreme environment applications. Typical operating temperature range is from -55°C to +230°C (Tighter temperature stability is available) with a frequency stability of ± 250 ppm over the entire operating temperature range.

Vectron's vertical integration in the following technical areas ensures the ability to design and manufacture state of the art high temperature frequency control products:

- BAW & SAW Design & Fabrication to produce high quality resonators.
- RF Oscillator Circuit Design.
- Established 250°C High Temperature Electronics Packaging Expertise.
- Established 250°C High Temperature Electronics Assembly & Test Expertise.
- Environmental Screening.

Vectron's manufacturing processes, from quartz resonator fabrication to oscillator electronics assembly and test, are painstakingly controlled via ISO and SPC procedures. Vectron fabricates high temperature quartz resonators using proprietary manufacturing processes designed specifically for high temperature and harsh environment applications. In order to ensure HI–REL in the field, critical electrode metallization and testing processes are conducted inside state-of-the-art Class 1K cleanrooms, while oscillator assembly is conducted in Class 10K cleanrooms. All high temperature oscillators are 100% tested before delivery.

Download:

Product Data Sheet (180 K)

Features:

- Continuous operating temperature range -55°C to 230°C
- Low jitter and phase noise
- 1.8Vdc, 2.5Vdc, 3.3Vdc or 5Vdc operation
- Compliant crystal mount for high shock & vibration
- Output frequency 32kHz to 40MHz standard (low frequency option is available)
- 8.0mm x 8.5mm x 2.9mm ceramic leaded package
- RoHS Compliant

Applications:

- Oil / Gas downhole tool
- Geophysical services
- High temperature industrial process control
- Extended temperature Military/Aerospace
- Avionics
- Engine control