

Other Standard Q-Tech Products:

Q-Tech's XO's:

QT606C/L – 100kRad – 50kHz to 150MHz
QT625C/L – 100kRad – 50kHz to 150MHz
QT641C/L – 100kRad – 50kHz to 150MHz

Q-Tech's TCXOs:

QT801 to 6 – 100kRad – 2MHz to 150MHz
QT811 to 6 – 100kRad – 2MHz to 350MHz
QT821 to 6 – 100kRad – 2MHz to 225MHz

Q-Tech's VCXOs:

QTV701 to 6 – 100kRad – 2MHz to 150MHz
QTV711 to 6 – 100kRad – 2MHz to 350MHz
QTV721 to 6 – 100kRad – 2MHz to 225MHz
QT725 – 100kRad – 2MHz to 225MHz

CLASSB+ Oscillators:

Fully approved for Flight, RadHard up to 100krad TID, No SEL, HCMOS, TTL, LVDS, LVC MOS. Swept Quartz Crystal. Low Phase Noise, Class S Screening available. Different Package Options available. Class K / TOR Element Evaluation. Smaller Form Factor and Lower Cost.

QT122 – 100kRad – 250kHz to 350MHz
QT128 – 100kRad – 250kHz to 350MHz
QT178 – 100kRad – 250kHz to 350MHz
QT193 – 100kRad – 250kHz to 350MHz
QT188 to 92 – 100kRad – 250kHz to 165MHz

Protec GmbH

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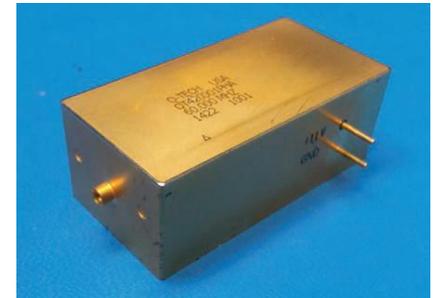
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New Q-Tech Products

Ultra³ Space OCO

(Ultra Miniature, Ultra Rugged, Ultra Stable)
QT4200 - 5.0Vdc, 12Vdc or 15Vdc

Space Qualified OCO Small size High Stability Oven Controlled Crystal Oscillator (OCO) is a high reliability signal generator that provides Sine wave or HCMOS output. The OCO is designed to be used in Aerospace applications.



It is designed to withstand radiation level up to 100kRad (total dose), high shock and vibration. The OCO has very low phase noise. Low G-Sensitivity SC-Cut Crystal utilized in the design guarantees 1PPB/G or better. The reliable construction of this design qualifies it for stringent environmental applications.



SAW Oscillator - 100krad

QT625S - 3.3 and 5.0Vdc Space Qualified SO

Q-Tech QT625S low phase noise Space Qualified, 100kRad(Si) Tolerant Hybrid SAW Oscillators (SO) provide superior performance at operating frequencies from 400MHz to 1.3GHz. QT625S delivers low phase noise, -110dBc/Hz @1 kHz offset, -170dBc/Hz noise floor. Typical vibration sensitivity is less than 2ppb/g.

The QT625S SO is a Class 2 hybrid per MIL-PRF-55310, hermetically sealed, and operated from -40°C to $+85^{\circ}\text{C}$. The design can employ internal frequency multiplication to optimize noise performance.

Voltage Controlled SAW Oscillator

QT725S Series - 3.3 and 5.0Vdc Space Qualified VCSCO

Q-Tech QT725S low noise Voltage Controlled SAW Oscillators provide superior performance at operating frequencies from 400 MHz to 1.3GHz. QT725S delivers low phase noise; 110dBc/Hz at 1 kHz offset and -170dBc/Hz noise floor. Typical vibration sensitivity is 1ppb/g.



The QT725S VCSCO is a Class 2 hybrid per MILPRF-55310, hermetically sealed, and operated from -40°C to $+85^{\circ}\text{C}$. Absolute Pull range (APR) is $\pm 20\text{ppm}$ min.