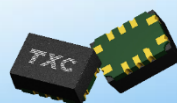




Making Every Connection Better

Precise Clock for Seamless Synchronization & Ultimate Data Transmission

ThermSym™ OCXO



Product Brief



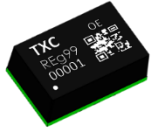
Think of Frequency
Think of TXC



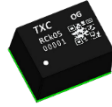
Bridge Smarter Connectivity for
Advanced Networks

<https://www.txccorp.com>

ThermSym™ OCXO Family







OE Series
14mm x 9mm



OG Series
9mm x 7mm

Features

 Multi-Freq. Selection	 ThermSym	 Ultra Low Phase Noise	 Miniature Size
10~50MHz	Thermal Symmetry	-161dBc/Hz Phase Floor	9.7mm x 7.5mm

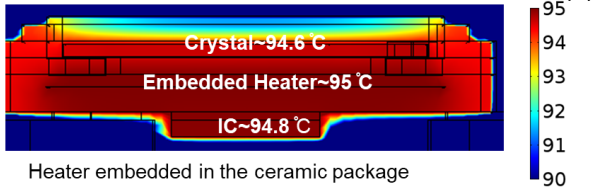


Empowering 5G Synchronization

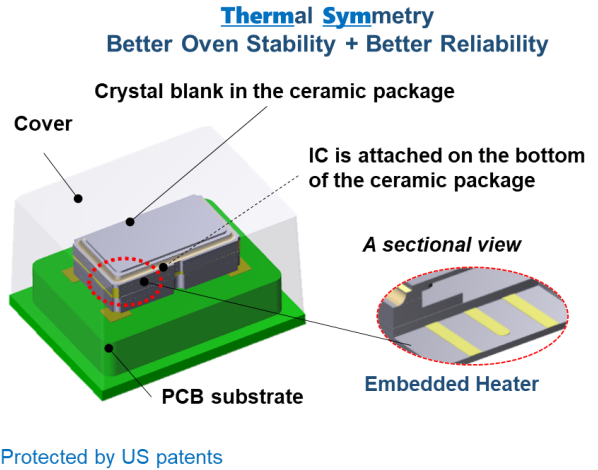
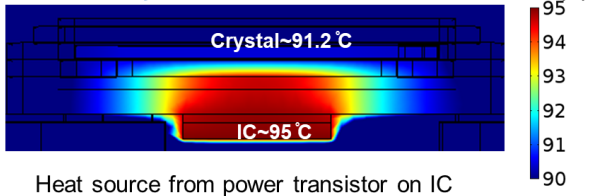
Introduction

TXC has used its extensive package design experience to develop a novel patented OCXO technology. The industry first SC-cut crystal IC OCXO in a small form package using TXC's patented ThermSym (Thermal Symmetry) technology with a heater-embedded ceramic package provides excellent thermal performance compared to conventional IC OCXO oven structure (Thermal Asymmetry). The SC-cut crystal of the ThermSym OCXO with better quality factor further enhances the phase noise, short-term stability, aging performance, etc.

😊 **TXC ThermSym™ Technology**
Symmetric thermal field



😞 **Conventional IC OXCO Structure**
Asymmetric thermal field



Applications & Compliance Support

- Small Cell
- RRU/AAU
- PTP enable Switch/Router
- Smart power grid synchronization
- Packet Based Telecom Time Slave Clock on G.8273.2
- SyncE Ethernet Equipment Clocks based on G.8262
- Enhanced Ethernet Equipment Clocks based on G.8262.1
- Telecom Transparent Clocks based on G.8273.3

Benefits

Feature	Benefits
ThermSym Technology Thermal Symmetry patented technology	<ul style="list-style-type: none"> • Thermal Symmetry patented technology with a heater-embedded ceramic package provides excellent thermal performance. • Better reliability compared to the solution that uses the embedded heater in the IC.
Integrated Circuit Technology Advanced oven control algorithm	<ul style="list-style-type: none"> • IC based, superior reliability compared to traditional discrete OXCO
Excellent frequency stability <±20ppb over -40 to 95°C	<ul style="list-style-type: none"> • Fully compliant with RRU, small cell, optical module and microwave transmission system applications.
High-Q SC-Cut Crystal Unit Innovative in-house developed initiatives and solutions <161 dBc/Hz at phase floor	<ul style="list-style-type: none"> • Higher Q-factor and better short-term and long-term stability compared to AT-cut crystal and MEMS resonator • Resilient to airflow interference • Enable RRU PLLs to use a single mode to meet both wander and jitter performance for network synchronization and air interface requirements