

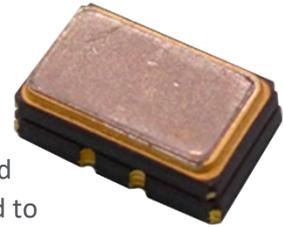


October 2, 2019

FOR IMMEDIATE RELEASE

New TCXO Models Designed for Small Cell Base Stations to Support 5G Architecture

Lisle, IL – CTS Corporation (NYSE: CTS) announces the release of two new miniature precision TCXO models, 535 and 536, providing a frequency reference with low noise, high stability performance attributes targeted for the evolving 5G New Radio [NR] standard and chipset solutions for small cells and remote radio head applications that will support 5G architecture. The 535 and 536 have been designed to achieve low noise performance at high transmission frequency while remaining energy efficient.



“With the exponential increase in connected devices through the expansion of the IoT coupled with the development of 5G mobile network infrastructures, CTS has developed the 535 and 536 to support our customers in achieving the highest performance,” said Ronen Cohen, senior product manager. “5G network infrastructures promise added capacity, faster data rates and vast improvements in reduced latency. Our new TCXO models will enable applications to operate on the 5G architecture.”

The new CTS models provide a low noise frequency reference signal, tight stability options down to ±0.1ppm, an operating temperature range from -40°C to +105°C that supports outdoor deployment and a choice between Clipped Sine or HCMOS outputs. Optional Voltage Control for frequency tuning and Output Enable function are also available. Standard product features, common market applications and new platforms are summarized below. Please refer to individual data sheets on our website to see more performance characteristics.

Product Features

- Clipped Sine or HCMOS Output
- Overall Frequency Stability ±4.6ppm
- Stability Options – ±0.10ppm to ±0.50ppm
- Temperature Range to -40°C to +105°C
- Voltage Control Option for Frequency Tuning
- Analog Temperature Compensation Engine
- Fundamental Crystal Designs
- Optional Enable Function Available
- Small Ceramic Surface Mount Package
- Tape and Reel Packaging

Common Frequencies Available

- | | | | |
|-------------|-------------|-------------|-------------|
| - 10.000MHz | - 20.000MHz | - 30.720MHz | - 50.000MHz |
| - 12.800MHz | - 24.576MHz | - 32.000MHz | - 54.000MHz |
| - 13.000MHz | - 25.000MHz | - 38.880MHz | |
| - 19.200MHz | - 26.000MHz | - 40.000MHz | |

[Consult data sheet and contact factory for availability of frequencies not listed.]

Market Applications

- 5G, 4G, LTE
- Femtocells, RRU, BBU
- Military Radio [Manpack]
- Inflight Entertainment
- Autonomous Technologies
- Synchronous Ethernet
- IP Networking
- Medical Imaging
- Stratum 3
- IEEE 1588 Timing
- Wireless Communication
- Test and Measurement



Product Summary

Selector Guide

MODEL	PACKAGE SIZE [mm]	OUTPUT LOGIC	FREQUENCY [MHz]	TEMPERATURE STABILITY	TEMPERATURE RANGE	SUPPLY VOLTAGE	PHASE JITTER [fs Typ]
535	5.0 x 3.2	Clipped Sine	10 – 54	±0.10ppm ±0.28ppm ±0.50ppm	-10°C to +70°C -40°C to +85°C -40°C to +105°C	+3.3V	<500
536	5.0 x 3.2	HCMOS	10 – 54	±0.10ppm ±0.28ppm ±0.50ppm	-10°C to +70°C -40°C to +85°C -40°C to +105°C	+3.3V	<500

https://www.ctscorp.com/connect_product_line/tcxo/

Sales Contact

Production volume and samples are available now. For more information call +1-800-982-5737 (North America), +65-6481-1466 (Asia) or +1-508-435-6831 (all other regions), E-mail:

frequencysales@ctscorp.com, see our website for more information as well as to contact a CTS Sales Representative or one of CTS’s many distribution partners.

About CTS

CTS (NYSE: CTS) is a leading designer and manufacturer of products that Sense, Connect, and Move. The company manufactures sensors, actuators, and electronic components in North America, Europe, and Asia. CTS provides solutions to OEMs in the aerospace, communications, defense, industrial, information technology, medical, and transportation markets.

For more information on CTS Corporation, please visit <https://www.ctscorp.com>.

Technical Contact

John Metzler
Application Engineer
E-mail: john.metzler@ctscorp.com
Tel: +1 (630) 577-8828
Lisle, IL 60532
USA

Media Relations Contact

Jacqueline Morris
Marketing Communications Manager
E-mail: mediarelations@ctscorp.com
Tel: +1 (630) 577-8865
Lisle, IL 60532
USA

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