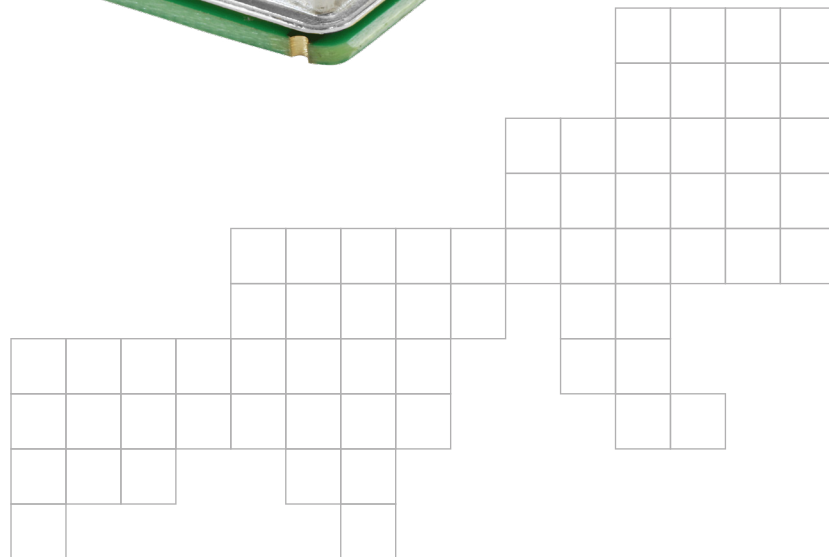


# OCXOs

Oven-Controlled Crystal Oscillators



# OCXOs

The term OCXO is an acronym for an Oven-Controlled Crystal Oscillator, a quartz-based timing device utilized in precision timing applications. Local clocking capabilities are often required for timing redundancy to provide back-up in case of loss of the timing reference. Within network system elements, they are designed to operate in both lock mode (locked to GPS or network reference) and holdover mode (loss of lock). They are there to maintain system accuracy and low drift rates when the system becomes unlocked.

As its name implies, an OCXO utilizes an internal oven whose temperature is very tightly controlled. Housed within this internal oven is a hermetically sealed quartz resonator and its peripheral oscillator circuitry. By taking advantage of a quartz crystal's frequency vs temperature characteristic, the OCXO can achieve excellent stability performance. The tight thermal control of the crystal and oscillator circuitry greatly minimizes the effects of variation in the surrounding ambient temperature.

CTS offers a complete line of high-performance OCXOs that are available in a broad range of frequencies and stabilities, which conform to industry standard packages.







## About US

CTS is a leading designer and manufacturer of products that Sense, Connect, and Move. We manufacture sensors, actuators, and electronic components in North America, Europe, and Asia, and provide solutions to OEMs in the aerospace & defense, medical, industrial, communications, information technology and transportation industries.

## Our Markets



Aerospace & Defence



Automotive & Electric Solutions



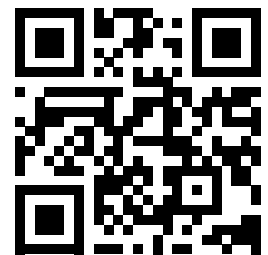
Industrial & Connectivity



Medical & Healthcare

## Custom Product Designs

As technology continues to move forward, we've been right alongside engineering intelligent ways to meet people's ever-changing needs. Contact us to work on custom product solutions for a variety of complex systems. Our teams of product experts are equipped to develop seamless solutions even under highly constricting conditions.



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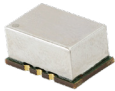
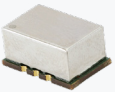
# CTS OCXOs

	Series	Output	Frequency Range (MHz)	Frequency Stability (ppb)	Package (mm)	Voltage (V)	Temperature Range (°C)
	137	HCMOS	10-26	±250 ±100 ±50	20 x 13 x 11 SMD/Thru-Hole	3.3 5.0	-40 to 85 -20 to 70 -10 to 60 0 to 50 0 to 70
	138	HCMOS	10-26	±100 ±50 ±20 ±10 10 pk-pk	20 x 13 x 11 SMD/Thru-Hole	3.3 5.0	-40 to 85 -20 to 70 -10 to 60 0 to 50 0 to 70
	139	HCMOS	10-40	±50 ±20 ±10 10 pk-pk	20 x 13 x 11 SMD/Thru-Hole	3.3 5.0	-40 to 85 -20 to 70 0 to 50
	149	HCMOS	10-50	±100 ±50 ±20 ±10 10 pk-pk	14.9 x 9.7 x 7.7 SMD	3.3 5.0	-40 to 85 -20 to 70 -10 to 60 0 to 50 0 to 70
	150	HCMOS	10-50	±250 ±200 ±100	14.9 x 9.7 x 7.7 SMD	3.3 5.0	-40 to 85 -20 to 70 -10 to 60 0 to 50 0 to 70
	151	LVC MOS	10-50	±100 ±50 ±20 ±10	9.8 x 7.6 x 5.65 SMD	3.3	-40 to 85 -20 to 70 0 to 70
	152	LVC MOS	10-50	±100 ±50 ±20 ±10	7.2 x 5.2 x 3.5 SMD	3.3	-40 to 85 -20 to 70 0 to 70
	196	HCMOS Sine	10-38.88	±20 ±10	36 x 27 x 14 Thru-Hole	3.3 5.0 12.0	-40 to 85 -10 to 70

# CTS OCXOs

	Series	Output	Frequency Range (MHz)	Frequency Stability (ppb)	Package (mm)	Voltage (V)	Temperature Range (°C)
	<b>197</b>	HCMOS Sine	10	1 pk-pk 0.8 pk-pk 0.5 pk-pk 0.2 pk-pk	36 x 27 x 13 Thru-Hole	5.0 12.7	-40 to 85 -30 to 70 -20 to 70 -10 to 60 0 to 50 0 to 70
	<b>1188</b>	HCMOS Sine	10-40	±100 ±50 ±30 ±20 ±10 10 pk-pk	25 x 25 x 13 Thru-Hole	3.3 5.0 12.7	-40 to 85 -30 to 70 -20 to 70 -10 to 60 0 to 50 0 to 70
	<b>1198</b>	HCMOS Sine	10-40	±100 ±50 ±30 ±20 ±10 10 pk-pk	25 x 22 x 12.7 SMD	3.3 5.0	-40 to 85 -30 to 70 -20 to 70 -10 to 60 0 to 50 0 to 70
	<b>1228</b>	HCMOS Sine	10-40	±100 ±50 ±30 ±20 ±10 10 pk-pk	20 x 20 x 11 Thru-Hole	3.3 5.0	-40 to 85 -30 to 70 -20 to 70 -10 to 60 0 to 50 0 to 70
	<b>1499</b>	LVC MOS	10-50	±100 ±50 ±20 ±10	14.6 x 9.6 x 6.7 SMD	3.3	-40 to 85 -20 to 70 0 to 70
	<b>1190100</b>	HCMOS	20	10 pk-pk	25 x 22 x 12.7 SMD	3.3 5.0	-40 to 85 -20 to 70
	<b>1190200</b>	HCMOS	12.8	10 pk-pk	25 x 22 x 12.7 SMD	3.3 5.0	-40 to 85 -20 to 70
	<b>1190300</b>	HCMOS	24.576	10 pk-pk	25 x 22 x 12.7 SMD	3.3 5.0	-40 to 85 -20 to 70

# CTS OCXOs

	Series	Output	Frequency Range (MHz)	Frequency Stability (ppb)	Package (mm)	Voltage (V)	Temperature Range (°C)
	<b>1198004</b>	LVC MOS	48	±20	25 x 22 x 12.7 SMD	3.3	-40 to 85
	<b>1380100</b>	HCMOS	20	10 pk-pk	20 x 13 x 11 SMD/Thru-Hole	3.3 5.0	-40 to 85 -20 to 70
	<b>1380200</b>	HCMOS	12.8	10 pk-pk	20 x 13 x 11 SMD/Thru-Hole	3.3 5.0	-40 to 85 -20 to 70
	<b>1380300</b>	HCMOS	24.576	10 pk-pk	20 x 13 x 11 SMD/Thru-Hole	3.3 5.0	-40 to 85 -20 to 70
	<b>1500001</b>	HCMOS	20	±100	14.9 x 9.7 x 7.0 SMD	3.3	-40 to 85
	<b>1500002</b>	HCMOS	12.8	±100	14.9 x 9.7 x 7.0 SMD	3.3	-40 to 85

# Contact Sales

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