



# SMD Crystal Oscillator

## CXO 2520

### Features

- Low Height
- From 156 KHz ~ 160 MHz
- High speed CMOS
- RoHS Compliant

**Table 1: General Specifications**

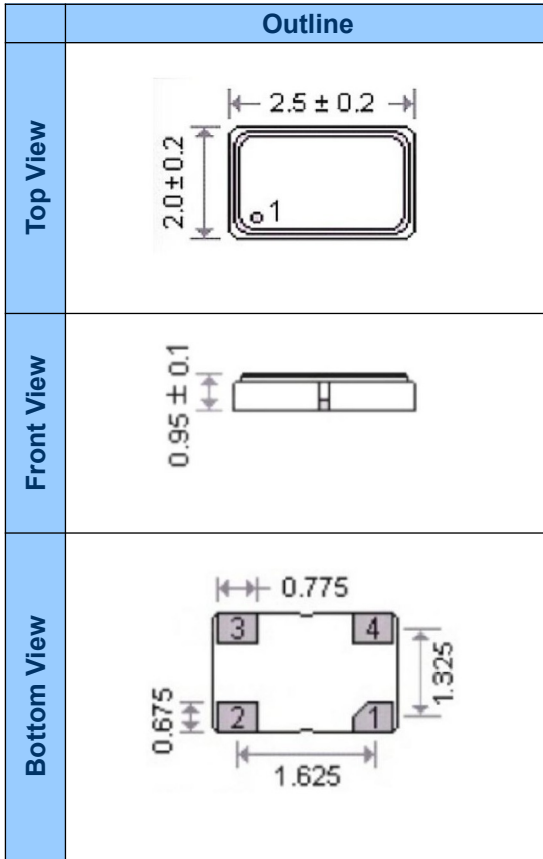
Frequency Range	0.156 MHz ~ 160 MHz
Output	HCMOS Compatible, Square Wave
Output Load	15 pF
Output Levels	V <sub>Low</sub> : 0.1 V <sub>dd</sub> (max.), V <sub>High</sub> : 0.9 V <sub>dd</sub> (min.)
Rise/ Fall Time	7 ns (max.): For +1.8 Volts and +2.5 Volts 10 ns (max.): For +3.3 Volts and +5.0 Volts
Start-up Time	5 mS (max.) (1 MHz ~ 32 MHz) 10 mS (max.) (32 MHz ~ 160 MHz)
Duty Cycle	45% to 55%
Frequency Stability	Select from Table 3
Operating Temperature Range (OTR)	Select from Table 3
Supply Voltage	+1.2 V DC (± 5%) [code: Y] +1.8 V DC (± 5%) [code: 1] +2.5 V DC (± 5%) [code: 2] +3.3 V DC (± 5%) [code: 3] +1.62 V DC ~ +3.63 V DC [code: 4] +2.25 V DC ~ +3.63 V DC [code: 6]
Current Consumption (upto 80 MHz)	20 mA (max.) @ +1.2 Volts 22 mA (max.) @ +1.8 Volts 25 mA (max.) @ +2.5 Volts 35 mA (max.) @ +3.3 Volts 40 mA (max.) @ +5.0 Volts
Aging @ 25°C	±3 ppm (max.) per year
Storage Temperature Range	-50°C to +100°C

**Table 2: Environmental Specifications**

Vibration	Frequency: 10 Hz ~ 55 Hz Amplitude: 1.5 mm peak, Acceleration: 20g Vibration waveform: Full waveform Duration: 2 Hours in each axis, 3 directions (X, Y, Z)
Drop Test	Method of Drop: Free Drop Dropping Floor: Hard wood board, 3cm/ min. Height: 75 cm ± 1.0 cm No. of Drops: 3

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## Mechanical Specifications



**Table 3: Operating Temperature and Stability**

OTR Codes	Stability Codes		F	G	H	M	K
	Frequency Stability		±20 ppm	±25 ppm	±30 ppm	±50 ppm	±100 ppm
E	Operating Temperature Range	-10°C to +70°C					
C		-20°C to +70°C					
G		-30°C to +80°C					
H		-30°C to +85°C					
I		-40°C to +85°C					
J5		-40°C to +105°C					
J3		-40°C to +125°C					

Denotes Available     Denotes not Available

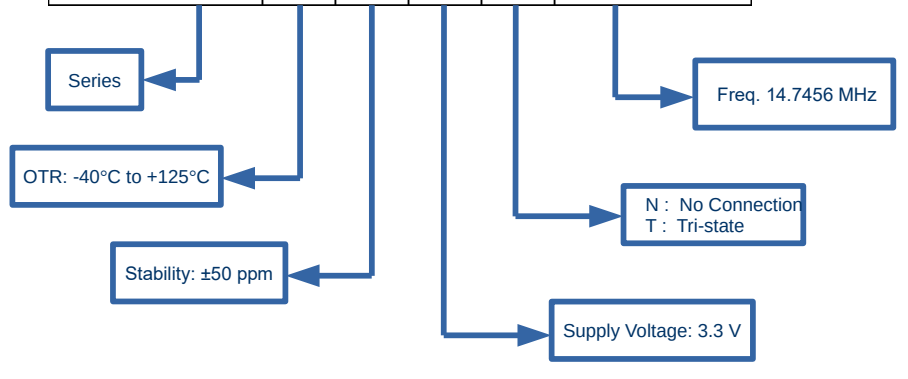
▲ All dimensions are in mm. Tolerance is ±0.1 mm, unless otherwise specified. Black Dot or Sharp Edges indicates Pad No. 1.

**Pad Configuration:**  
**Pad 1:** Tri-state (Standard), No Connection (Optional)  
**Pad 2:** Ground  
**Pad 3:** Output  
**Pad 4:** Supply Voltage

## Ordering Information

### Example

CXO 2520 J3 M 3 T 014M745600



Specifications subject to change without prior notice

Rev. Date: 22<sup>nd</sup> December 2025

Note: Not all combinations of options are available. Other specifications may be available upon request.

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Page 2 of 2

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