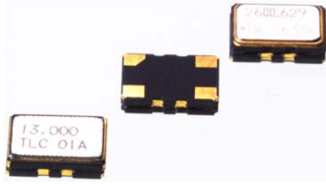


# Temperature Compensated Crystal Oscillator (TCXO/VCTCXO)

High stability  
Ceramic Package  
One chip IC

Pb-free : RoHs compliance



## CO-TL3225 , CO-TL3225V

### Typical applications

- Mobile Telecommunication, Cellular Phone, Base Station, GPS, PHS

### Features

- 10.000 to 52.000 MHz.
- Low Power Supply Voltage (1.7V, 1.8V) .
- Miniature type essential in the high density PCB.
- Package : Metal lid + Ceramic package.
- 3.2×2.5×1.0mm

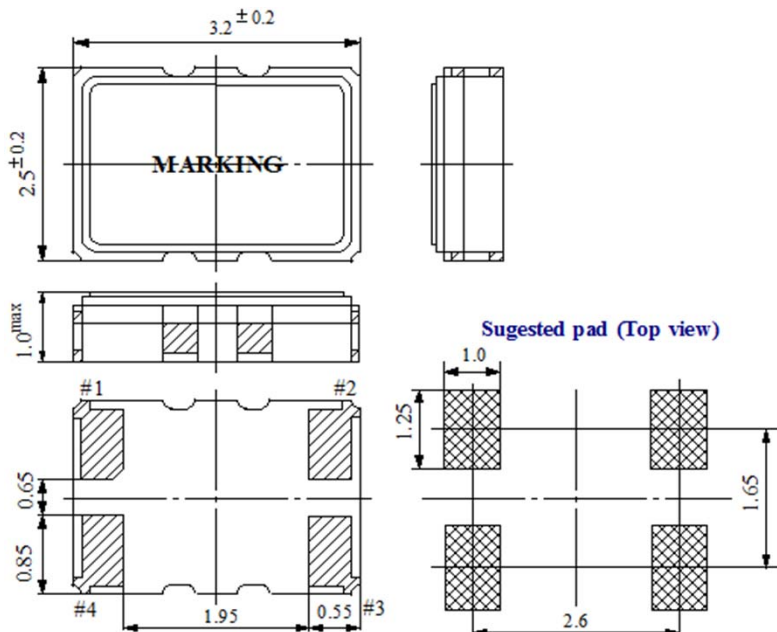
### Specifications

Model		CO-TL3225	CO-TL3225V
Available Frequency Range		10.000 to 52.000 MHz	
Frequency Stability	Tolerance (at 25° C)	±1.0 ppm	
	Temperature(Ref. to 25° C)	±1.5 ppm to ±3.0ppm (-30 to +85° C)	
	Supply Voltage Change	±0.2 ppm	
	Load Change	±0.2 ppm	
Power Supply Voltage		+1.7V, +1.8V	
Power Supply Current		1.5 mA max.	
Output	Voltage	0.8 Vp-p min.	
	Load	10 KΩ // 10 pF	
	Waveform	Clipped Sine Wave (DC Coupled)	
External Control Function		—	±3.0 to ±5.0 ppm / +0.9±0.6V DC
Storage Temperature Range		-40 to +85° C	
Phase Noise		-135 dBc/Hz max (at 1KHz)	

### Environmental Characteristics

Description	Specification
Aging (at 25° C)	±1.0 ppm max / Year (at 25° C)
Fall Shock	Test : 3 time free drop onto concrete board from 150cm high Result: ±1.0 ppm max.
Vibration Shock	Test : Freq. 5-500Hz, Amplitude 1.5mm, Test time 4cycles/XYZ axis Result: ±1.0 ppm max.
Solderability	Test : Immersed into solder bath at 235±° C for 3 sec. Result: More than 95%
Humidity	Test : 90 to 95%RH at 60±3° C±500 hours Result: ±1.0 ppm max.
Reflow Heat	Test : 2 times of IR reflow soldering in accordance with reflow temperature profile as per the document No.:TR-0531 Result: ±1.0 ppm max.

### Outline Drawing & Suggested Pad



TERMINAL	CONNECTION	
	TCXO	VCTCXO
#1	GND	Vcont
#2	GND	GND
#3	OUTPUT	OUTPUT
#4	Vcc	Vcc