



# TCXO/VC-TCXO ULTRA MINIATURE SIZE LOW PROFILE HIGH STABILITY TG-5006CJ

**NEW**



Product Number (Please contact us)  
X1G004131xxxx00

- Frequency range : 13 MHz to 52 MHz
- Supply voltage : 1.8 V / 2.8 V
- Frequency / temperature characteristics :  $\pm 0.5 \times 10^{-6}$  Max. or  $\pm 2.0 \times 10^{-6}$  Max.
- External dimensions: 2.0 x 1.6 x 0.73 mm
- Applications : GPS, Wireless communication devices (CDMA, WCDMA, LTE, WiMAX, other)
- Features : High stability  
Low supply voltage (1.8 V)



Actual size



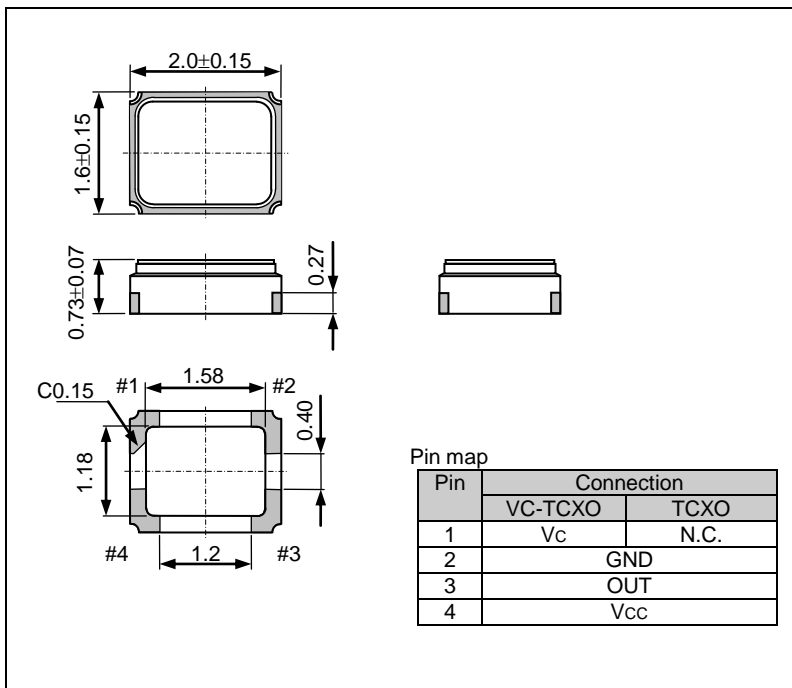
## Specifications (characteristics)

Item	Symbol	Specifications		Conditions / Remarks
		VC-TCXO	TCXO	
Output frequency range	f <sub>o</sub>	13.000 MHz to 52.000 MHz 16.367667 MHz, 16.368 MHz, 16.369 MHz, 19.2 MHz, 26 MHz and 38.4 MHz		Standard frequency
Supply voltage	V <sub>cc</sub>	1.8 V $\pm$ 0.1 V / 2.8 V $\pm$ 0.14 V (Range :1.7 V to 3.3 V)		
Storage temperature	T <sub>stg</sub>	-40 °C to +90 °C		Storage as single product.
Operating temperature	T <sub>use</sub>	-30 °C to +85 °C		
Frequency tolerance	f <sub>tol</sub>	$\pm 2.0 \times 10^{-6}$ Max.		After reflow, +25 °C
Frequency/temperature characteristics	fo-Tc	$\pm 0.5 \times 10^{-6}$ Max. / -30 °C to +85 °C		High stability version for GPS
		$\pm 2.0 \times 10^{-6}$ Max. / -30 °C to +85 °C		Standard stability version
		$\pm 2.0 \times 10^{-6}$ Max. / -40 °C to +85 °C (Option)		Customized product
Frequency/load coefficient	fo-Load	$\pm 0.2 \times 10^{-6}$ Max.		10 k $\Omega$ // 10 pF $\pm$ 10 %
Frequency/voltage coefficient	fo-V <sub>cc</sub>	$\pm 0.2 \times 10^{-6}$ Max.		V <sub>cc</sub> =1.8 V $\pm$ 0.1 V or 2.8 V $\pm$ 0.14 V
Frequency aging	f <sub>age</sub>	$\pm 1.0 \times 10^{-6}$ Max.		+25 °C, First year, 13 MHz $\leq$ f <sub>o</sub> $\leq$ 40 MHz
		$\pm 1.5 \times 10^{-6}$ Max.		+25 °C, First year, 40 MHz < f <sub>o</sub> $\leq$ 52 MHz
Current consumption	I <sub>cc</sub>	1.5 mA Max.		13 MHz $\leq$ f <sub>o</sub> $\leq$ 26 MHz
		2.0 mA Max.		26 MHz < f <sub>o</sub> $\leq$ 52 MHz
Input resistance	R <sub>in</sub>	500 k $\Omega$ Min.	—	V <sub>c</sub> - GND (DC)
Frequency control range	f <sub>cont</sub>	$\pm 8.0 \times 10^{-6}$ to $\pm 15.0 \times 10^{-6}$	—	V <sub>c</sub> =0.9 V $\pm$ 0.6 V (V <sub>cc</sub> =1.8 V) or V <sub>c</sub> =1.4 V $\pm$ 1.0 V (V <sub>cc</sub> =2.8 V)
Frequency change polarity	—	Positive polarity		—
Symmetry	SYM	40 % to 60 %		GND level (DC cut)
Output voltage	V <sub>pp</sub>	0.8 V Min.		Peak to Peak
Output load condition	Load <sub>R</sub>	10 k $\Omega$		DC cut capacitor = 0.01 $\mu$ F
	Load <sub>C</sub>	10 pF		

\* Note : Please contact us for requirements not listed in this specification.

## External dimensions

(Unit:mm)



## Footprint (Recommended)

(Unit:mm)

