

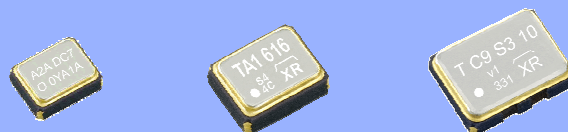
**TCXO/VC-TCXO  
HIGH STABILITY**

**TG - 5006CJ / CG / CE**

- Frequency range : 13 to 52MHz(TG-5006CJ/CG)  
13 to 20MHz, 26 to 40MHz(TG-5006CE)
- Supply voltage : 1.8 V Typ./ 2.8 V Typ./ 3.0 V Typ./ 3.3 V Typ.
- Frequency / temperature characteristics :  $\pm 0.5 \times 10^{-6}$  Max or  $\pm 2.0 \times 10^{-6}$  Max.
- Applications : GPS, RF, Wireless communication devices (CDMA, WCDMA, LTE, WiMAX, other)
- Features : High stability



Product Number (Please contact us)  
**TG-5006CJ** : X1G004131xxxx00  
**TG-5006CG** : X1G004211xxxx00  
**TG-5006CE** : X1G004201xxxx00



TG-5006CJ (2.0 × 1.6 × 0.73 mm)    TG-5006CG (2.5 × 2.0 × 0.8 mm)    TG-5006CE (3.2 × 2.5 × 0.9 mm)

Actual size

TG-5006CJ	TG-5006CG	TG-5006CE
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**Specifications (characteristics)**

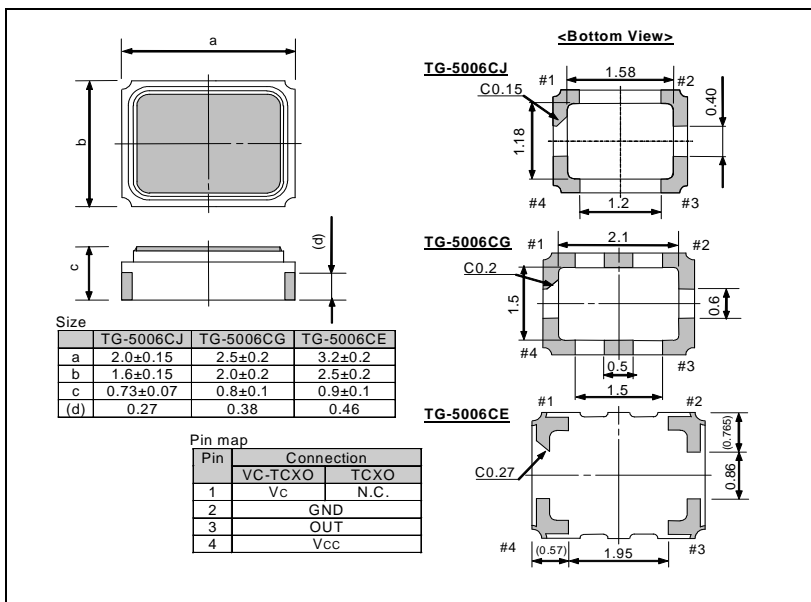
Item	Symbol	VC-TCXO	TCXO	Conditions / Remarks
Output frequency range	fo	16.367667 MHz, 16.368 MHz, 16.369 MHz, 19.2 MHz, 26 MHz and 38.4 MHz		Standard frequency
		13.000 MHz to 52.000 MHz		TG-5006CJ/TG5006CG
		13.000 MHz to 20.000 MHz, 26.000 MHz to 40.000 MHz		TG-5006CE
Supply voltage	Vcc	1.8 V $\pm 0.1$ V / 2.8 V $\pm 5\%$ / 3.0 V $\pm 5\%$ / 3.3 V $\pm 5\%$		Supply voltage range : 1.7 V to 3.465 V
Storage temperature	T_stg	-40 °C to +90 °C		Storage as single product.
Operating temperature	T_use	-30 °C to +85 °C		
Frequency tolerance	f_tol	$\pm 2.0 \times 10^{-6}$ 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		Customized product.(Option)
Frequency/load coefficient	fo-Load	$\pm 0.2 \times 10^{-6}$ Max.		10 k $\Omega$ // 10 pF $\pm 10\%$
Frequency/voltage coefficient	fo-Vcc	$\pm 0.2 \times 10^{-6}$ Max.		Vcc $\pm 5\%$
Frequency aging	f_age	$\pm 1.0 \times 10^{-6}$ Max.		+25 °C, First year, 13 MHz $\leq$ fo $\leq$ 40 MHz
		$\pm 1.5 \times 10^{-6}$ Max.		+25 °C, First year, 40 MHz < fo $\leq$ 52 MHz
Current consumption	Icc	1.5 mA Max.		13 MHz $\leq$ fo $\leq$ 26 MHz
		2.0 mA Max.		26 MHz < fo $\leq$ 52 MHz
Input resistance	Rin	500 k $\Omega$ Min.		VC- GND (DC)
Frequency control range	f_cont	$\pm 8.0 \times 10^{-6}$ to $\pm 15.0 \times 10^{-6}$		Vc = 0.9 V $\pm 0.6$ V (Vcc = 1.8 V) or Vc = 1.4 V $\pm 1.0$ V (Vcc = 2.8 V) or Vc = 1.5 V $\pm 1.0$ V (Vcc = 3.0 V) or Vc = 1.65 V $\pm 1.0$ V (Vcc = 3.3 V)
Frequency change polarity	—	Positive polarity		—
Symmetry	SYM	40 % to 60 %		GND level (DC cut)
Output voltage	Vpp	0.8 V Min.		Peak to Peak
Start-up time	t_str	2.0 ms Max.		T=0 at 90% Vcc
Output load condition	Load_R	10 k $\Omega$		DC cut capacitor = 0.01 $\mu$ F
	Load_C	10 pF		

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

Product Name                    TG-5006 CJ-\*\*\* 19.200000MHz  
(Standard form)                    ①                    ②                    ③                    ④  
   ①Model                    ②Package type                    ③Spec segment (Please contact us)                    ④Frequency

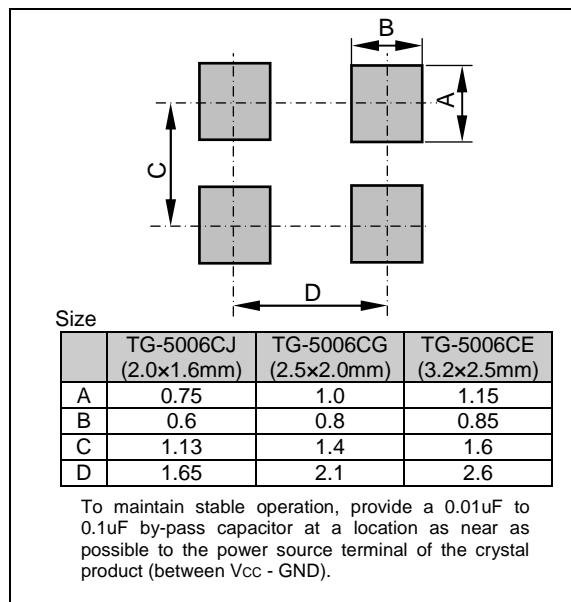
**External dimensions**

(Unit: mm)



**Footprint (Recommended)**

(Unit: mm)



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At Seiko Epson, all environmental initiatives operate under the Plan-Do-Check-Action (PDCA) cycle designed to achieve continuous improvements. The environmental management system (EMS) operates under the ISO 14001 environmental management standard.

All of our major manufacturing and non-manufacturing sites, in Japan and overseas, completed the acquisition of ISO 14001 certification.

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	► Pb free.
	► Complies with EU RoHS directive. *About the products without the Pb-free mark. Contains Pb in products exempted by EU RoHS directive. (Contains Pb in sealing glass, high melting temperature type solder or other.)
	► Designed for automotive applications such as Car Multimedia, Body Electronics, Remote Keyless Entry etc.
	► Designed for automotive applications related to driving safety (Engine Control Unit, Air Bag, ESC etc ).

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