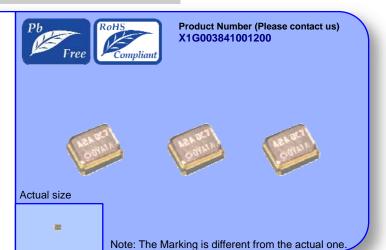
SEIKO EPSON CORPORATION

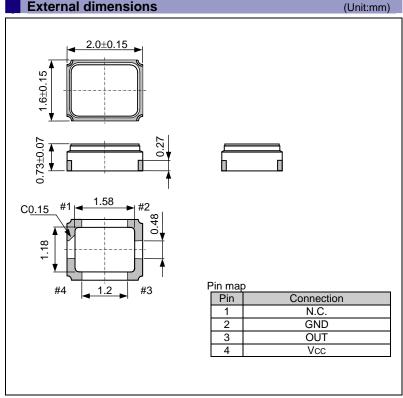
tcxo ultra miniat high stabili TG - 503	T١	
 Frequency range Supply voltage Frequency / temper 	:	1.8 V, 2.8 V and 3.0 V Typ.
	: s: :	$\pm 0.5 \times 10^{-6}$ Max. 2.0 × 1.6 × 0.73 mm Mobile devices, GPS High stability Low supply voltage (1.8 V)

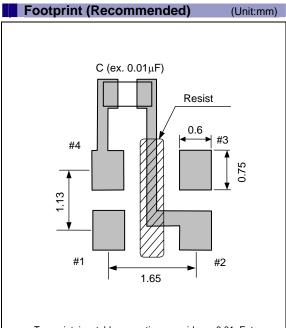


Specifications (characteristics)

Item	Symbol	Specifications	Conditions / Remarks	
Output frequency range	fo	26 MHz		
Supply voltage	Vcc	1.8 V ±0.1 V, 2.8 V ±10 %, 3.0 V ±10 %		
Storage temperature	T_stg	-40 ℃ to +85 ℃	Store as bare 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	±0.5 × 10 ⁻⁶ Max.	-30 °C to +85 °C	
Frequency/load coefficient	fo-Load	±0.2 × 10 ⁻⁶ Max.	10 kΩ // 10 pF ±10 %	
Frequency/voltage coefficient	fo-Vcc	±0.2 × 10 ⁻⁶ Max.	1.8 V ±0.1 V, 2.8 V ±10 %, 3.0 V ±10 %	
Frequency aging	f_age	±1.0 × 10 ⁻⁶ Max.	+25 °C, First year	
Current consumption	Icc	1.5 mA Max.	Vcc=2.8 V, 10 kΩ// 10 pF	
Symmetry	SYM	40 % to 60 %	GND level (DC cut)	
Output voltage	Vpp	0.8 V Min.	peak to peak	
Output load condition	Load_R	10 kΩ	DC cut capacitor = 0.01 μF	
Output load condition	Load_C	10 pF		

External dimensions





To maintain stable operation, provide a 0.01uF to 0.1uF by-pass capacitor at a location as near as possible to the power source terminal of the crystal product (between Vcc - GND). The above connection is one example.

PROMOTION OF ENVIRONMENTAL MANAGEMENT SYSTEM CONFORMING TO INTERNATIONAL STANDARDS

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.

WORKING FOR HIGH QUALITY

In order provide high quality and reliable products and services than meet customer needs,

Seiko Epson made early efforts towards obtaining ISO9000 series certification and has acquired ISO9001 for all business establishments in Japan and abroad. We have also acquired ISO/TS 16949 certification that is requested strongly by major automotive manufacturers as standard.

Explanation of the mark that are using it for the catalog

Standards Organization in 1996 against the background of growing concern regarding global warming, destruction of the ozone layer, and global deforestation.

ISO 14000 is an international standard for environmental

management that was established by the International

ISO/TS16949 is the international standard that added the sector-specific supplemental requirements for automotive industry based on ISO9001.

	Pb Free	► Pb free.
	RollS	► Complies with EU RoHS directive.
Compliant	*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.)
	For Automotive	► The products have been designed for high reliability applications such as Automotive.

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