

**CRYSTAL OSCILLATOR**
SPXO**TCO - 710x series**

- Frequency range : 1.5 MHz to 75 MHz
- Supply voltage : 3.3 V
- External dimensions: 5.0 × 3.2 × 1.0 t (mm) Typ.
- Function : Standby ($\overline{ST}$)

Product Number (please contact us)
X1G00xxx1xxxx00

Actual size

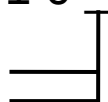
**Specifications (characteristics)**

Item	Symbol	TCO-710*X1A*	Remarks
Output frequency range	f_o	1.500 MHz to 75.000 MHz	Please contact us for inquiries regarding the available frequencies.
Supply voltage	V _{CC}	3.3 V $\pm$ 0.33 V	
Storage temperature range	T _{stg}	-55 °C to +125 °C	Store as bare product after unpacking.
Operating temperature range	T _{use}	As per below description	
Frequency tolerance	f_{tol}	As per below description.	
Current consumption	I _{CC}	20 mA Max.	No load condition
Symmetry	SYM	40 % to 60 %	50 % V _{CC} level
High output voltage	V _{OH}	90 % V _{CC} Min.	I _{OH} =-5 mA
Low output voltage	V _{OL}	10 % V _{CC} Max.	I _{OL} =5 mA
Output load condition (CMOS)	L _{CMOS}	15 pF Max.	
Output enable / disable input voltage	V _{IH}	70 % V _{CC} Min.	V _{IH} or OPEN : Enable
	V _{IL}	30 % V _{CC} Max.	V _{IL} or GND : Disable
Rise time / Fall time	t _r / t _f	6 ns Max.	10 % V _{CC} to 90 % V _{CC} level
Start-up time	t _{str}	10 ms Max.	Time at minimum supply voltage to be 0 s
Frequency aging	f _{aging}	$\pm 5 \times 10^{-6}$ / year Max.	+25 °C, V _{CC} =3.3 V, First year

* Part Number

TCO - 710 X1A

<Frequency tolerance / V_{CC} tolerance>
 $\pm 50 \times 10^{-6}$ Max. / V_{CC} ± 10 % : 6
 $\pm 100 \times 10^{-6}$ Max. / V_{CC} ± 10 % : 7

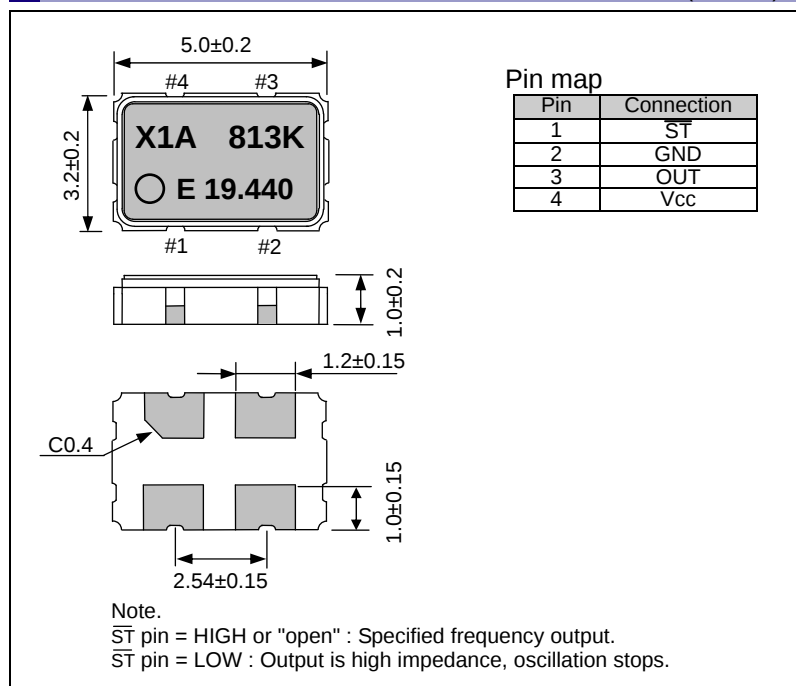


<Operating temperature range>

BLANK: 0 °C to +70 °C
1: -10 °C to +70 °C
2: -20 °C to +70 °C
4: -40 °C to +85 °C

External dimensions

(Unit:mm)

**Footprint (Recommended)**

(Unit:mm)

