



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



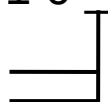
Specifications (characteristics)

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



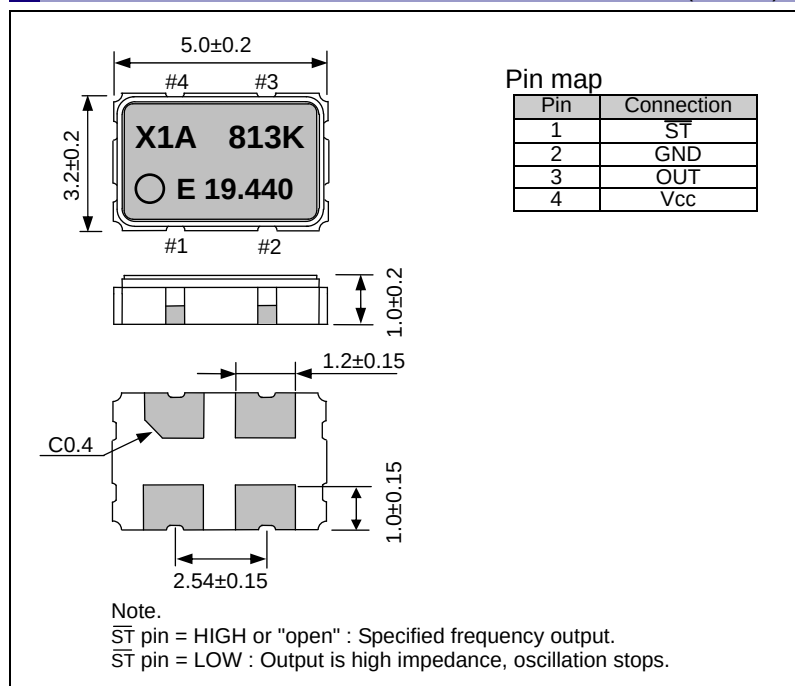
<Operating temperature range>

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)

