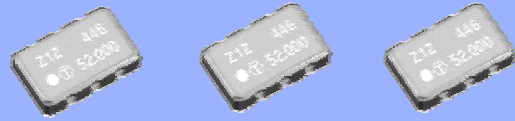


VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR (VCXO)

TCO-7106X1Z4

- Frequency range : 1.75 MHz to 52 MHz
- Supply voltage : 3.3 V
- Frequency control range: $\pm 75 \times 10^{-6}$
- Thickness : 1.2mm Typ.
- Function : Output enable(OE)



Actual size



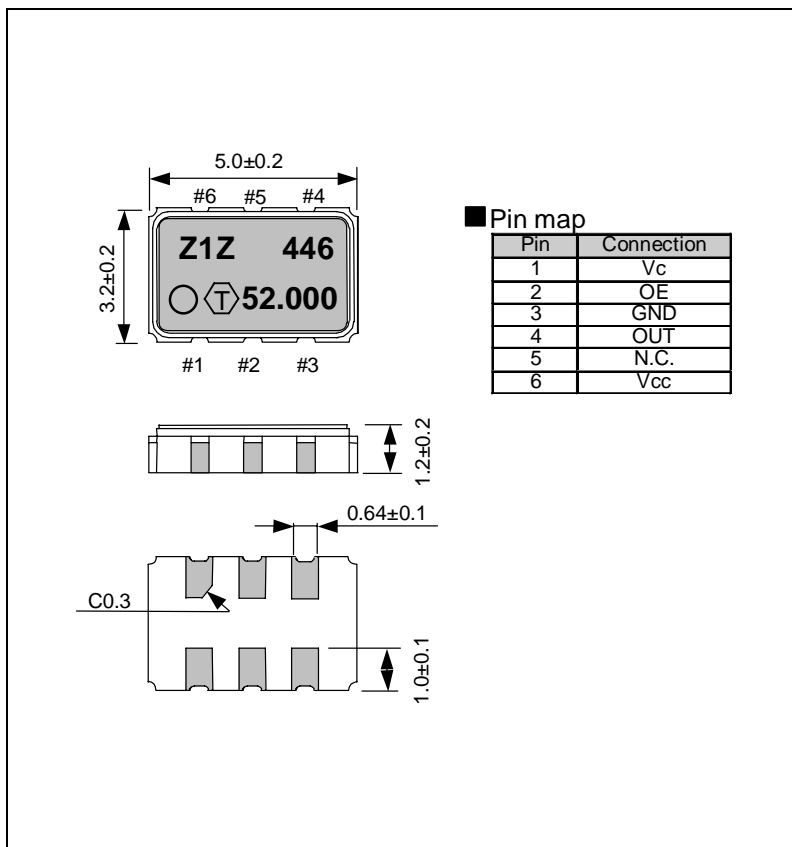
Specifications (characteristics)

Item	Symbol	TCO-7106X1Z4	Remarks
Output frequency range	f_o	1.750 MHz to 52.000 MHz	Please contact us for inquiries regarding available frequencies.
Supply voltage	Vcc	3.3 V ± 0.165 V	
Storage temperature range	T_stg	-40 °C to +85 °C	Store as bare product after unpacking
Operating temperature range	T_use	-40 °C to +85 °C	
Frequency tolerance	$f_{tol}(osc)$	$\pm 50 \times 10^{-6}$ Max.	Vc=1.65V
Current consumption	Icc	20 mA Max.	No load condition.
Frequency control range	fcont	$\pm 75 \times 10^{-6}$ Min.	Vc= 1.65 V \pm 1.65 V
Input resistance	Rin	80 k Ω Min.	DC level
Frequency change polarity	—	Positive slope	Vc= 0 to 3.3 V
Symmetry	SYM	40 % to 60 %	50 % Vcc level
High output voltage	VOH	90 % Vcc Min.	IOH= -0.8mA
Low output voltage	VOL	10 % Vcc Max.	IOL= 3.2mA
Output load condition (CMOS)	L_CMOS	15 pF Max.	
Output enable / disable input voltage	V _{IH}	70 % Vcc Min.	V _{IH} or OPEN : Enable
	V _{IL}	30 % Vcc Max.	V _{IL} or GND : Disable
Rise time / Fall time	t _r / t _f	5 ns Max.	20 % Vcc to 80 % Vcc level
Oscillation start up time	t _{osc}	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, Vcc=3.3 V, First year

* Please keep Vc pin open or ground while powering up Vcc.

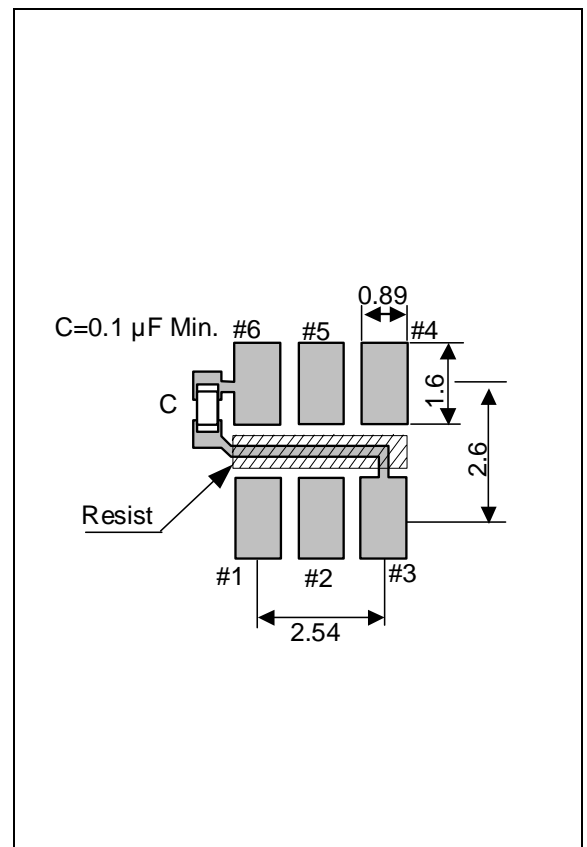
External dimensions

(Unit :mm)



Footprint (Recommended)

(Unit :mm)





Actual size

