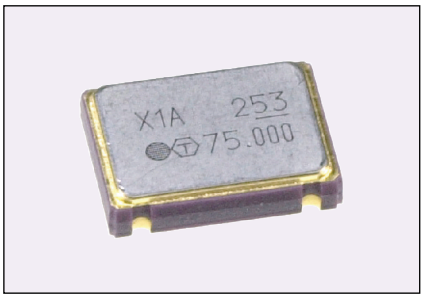
TOYOCOM

Crystal Clock Oscillator



TCO-7086X1A

SMO-N-K CMOS

Features

- CMOS logic output
- Ceramic package
- Space savings
- Enable / Disable feature

Absolute Maximum Ratings

Parameter	Symbol	Rating
Supply voltage	V_{CC}	-0.5 to +7.0 V
Input voltage	V_{IN}	-0.5 to V_{CC} +0.5 V
Output voltage	V_O	-0.5 to V_{CC} +0.5 V
Input current	I_{IN}	±10 mA
Output current	I_O	±25 mA
Storage temperature	T_{stg}	-55 to +125 °C
Soldering condition	T_{sol} T	+260°C / 20sec or +230°C / 180sec

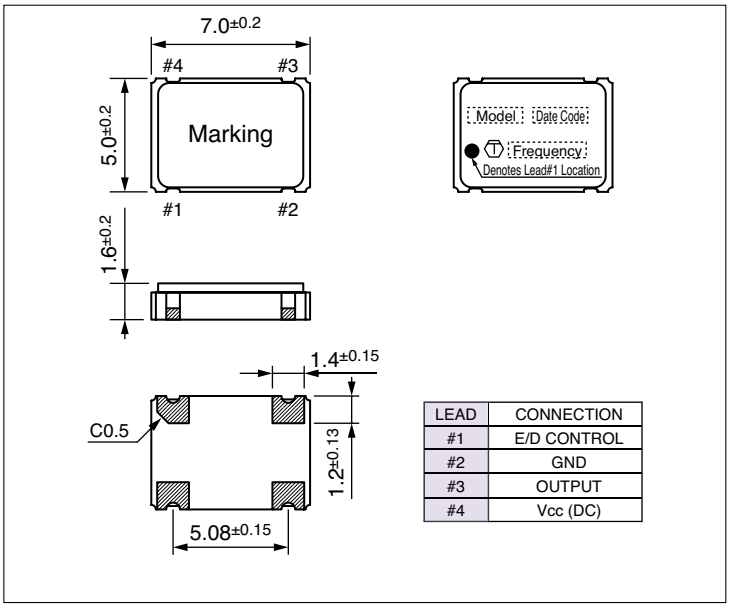
Specifications

Parameter		TCO-7086X1A	Conditions
Frequency	fo	1.5 to 75 MHz	—
Frequency Stability	Δf/fo	±50 ppm max.	(*1)
Operating Temperature	Topr	0 °C to +70 °C	—
Supply Voltage	Vcc	+3.3 V ±10 %	DC
Supply Current	Icc	20mA max.	Vcc= +3.63V
Input Voltage	V_{IH} V_{IL}	V_{IH}=70 % Vcc min. / V_{IL}=30 % Vcc max.	#1:V_{IH} or OPEN ··· Enable #1:V_{IL} or GND ··· Disable
Output Voltage	V_{OH} V_{OL}	V_{OH}=90 % Vcc min. / V_{OL}=10 % Vcc max.	I_{OH}= -5mA, I_{OL}=+5mA at Vcc=+2.97V
Symmetry	SYM	40 to 60 %	at 50% Vcc
Rise/Fall time	tr/tf	6 ns max.	at 10% to 90% Vcc
Load Capacitance	CL	15 pF max.	—
Start-up time	tst	10 ms max.	(*2)

*1 Inclusive of calibration tolerance at +25°C, operating temperature, operating voltage range.

*2 Rise time (0 to +2.97V) of Vcc >150μs

Package Outlines [Dimensions in mm]

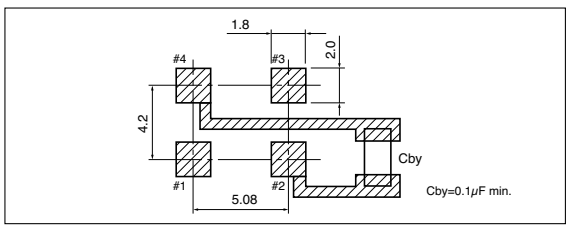


LEAD	CONNECTION
#1	E/D CONTROL
#2	GND
#3	OUTPUT
#4	Vcc (DC)

Test Circuit

See Test Circuit page TEST-4

Footprint [Dimensions in mm]



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