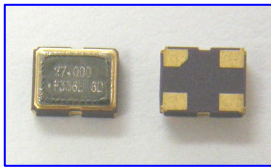


# 32.768KHz SMD型水晶発振器 FCO-306Z 32.768KHz

# SMD CRYSTAL CLOCK OSCILLATORS



## FCO-306Z

FCO-306Zは超小型サイズで高密度実装が可能な32.768KHz クロック用水晶発振器です。FujiCom 's SMD oscillators "FCO-306Z" is ultra miniature size used for small and high density of 32.768KHz.

### Features

- ☆ 低背型 / Low Profile 3.2x2.5x0.9mm
- ☆ 低消費電流 / Low Current consumption 1.5  $\mu$  A
- ☆ リフロー可能 / Reflow soldering available.
- ☆ 鉛フリー、RoHS指令対応品 / Pb free, RoHS compliant

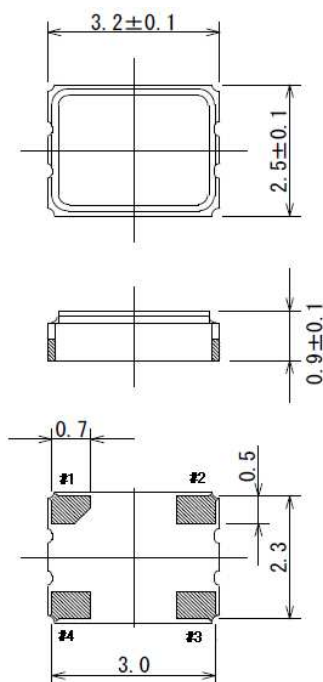
### 仕様 / Specification

特性項目 / Parameters	条件 / Conditions	仕様 / Specifications
型名 / Type	トライステート付 / Tri-state available	FCO-306Z
電源電圧 / Power supply voltage	DC VDD	+3.3V $\pm$ 10% STD (+1.5V $\sim$ +5.5V available)
周波数 / Frequency range		32.768KHz
動作温度範囲 / Operating temp. range		-40 $^{\circ}$ C $\sim$ +85 $^{\circ}$ C
保存温度範囲 / Storage temp. range		-55 $^{\circ}$ C $\sim$ +125 $^{\circ}$ C
周波数偏差 / Frequency stability	VDD=3.3V, 25 $^{\circ}$ C $\pm$ 3 $^{\circ}$ C	5 $\pm$ 20ppm
温度特性 / Frequency characteristic	-20 $\sim$ +70 $^{\circ}$ C at 25 $^{\circ}$ C	-120 $\sim$ +10ppm
	-40 $\sim$ +85 $^{\circ}$ C at 25 $^{\circ}$ C	-140 $\sim$ +10ppm
経時変化 / Aging	25 $^{\circ}$ C $\pm$ 3 $^{\circ}$ C	$\pm$ 5ppm/year
負荷 / Load	Load (CL)	15pF max.
波形対称性 / Symmetry	50% VDD	40% / 60%
立上り/立下り / Rise / Fall time (Tr, Tf)	10%VDD $\sim$ 90%VDD, (CL=max.)	100nsec. Max.
出力電圧 / Output Voltage	VOL / VOH	0.4Vmax / Vdd-0.4V min.
消費電流 / Current consumption	Vdd=+3.3V / Vdd+5.0V	1.5 $\mu$ A max / 2.5 $\mu$ A max.
起動時間 / Start-up time	VDD=3.3V $\pm$ 10%, -20 $^{\circ}$ C $\sim$ +70 $^{\circ}$ C	500msec. max. (3.0 sec. max. +1.3V $\sim$ +2.97V)

トライステート機能 / Tri-state function : #1 Open - #3 Active, #1 >=70%VDD - #3 Active, #1 <=30%VDD - #3 High impedance

### 外形寸法図 Dimensions (mm)

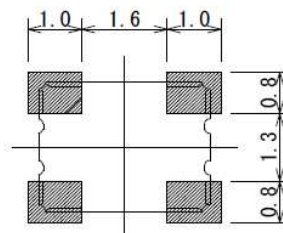
### FCO-306Z



### Pad Connection

#1	Enable / Disable
#2	GND
#3	OUTPUT
#4	Vdd

### Land Pattern



### Test Circuit

