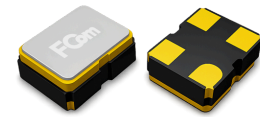


FCom Crystal Oscillator

Series FCO-2K

32.768 kHz Oscillator 2.5×2.0 mm



Feature

- Typical 2.5×2.0×0.81mm SMD package
- Low Power Supply Voltage: 3.3, 2.5, 1.8 Supply Options
- RoHS and REACH Compliant , Pb-free

Application

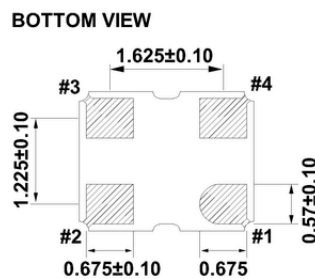
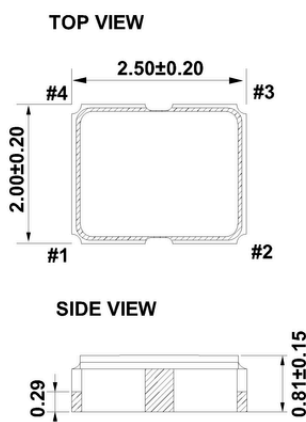
- RTC Module
- Smartphone
- IoT
- Wearable Device
- Watch, Medical

ELECTRICAL SPECIFICATIONS

Parameters	Symbol	Min.	Typ.	Max.	Units	Notes
Nominal Frequency	F	32.768			kHz	Test condition Ambient temperature: 25 ± 5°C Relative humidity: 40% ~ 70%
Frequency Tolerance	FT	± 10			ppm	
Supply Voltage	Vdd	1.8V, 2.5V, 3.3V			V	
Current Consumption	Icc	-		35	uA	
Stand by Current	Icc(ST)	-	-	3	uA	
Output Load (CMOS)	CL	15			pF	
Output Level	VoH	90% Vdd	-	-	V	Output High
	VoL	-	-	10% Vdd	V	Output Low
Rise Time / Fall Time	Tr / Tf	-	-	15	nSec	@10%-90%
Tri-State Mode (Input to Pin 1)	VIH	70% Vdd	-	-	V	Enable
	VIL	-	-	30% Vdd	V	Disable
Duty Cycle	TH/T	45	~	55	%	
Start-up Time	Tosc	-	-	20	mSec	
Aging	ppm/yr	±3			ppm/yr	1st. Year at 25°C

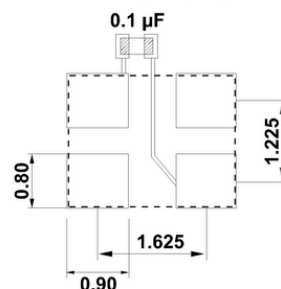
Note : The table shows common spec. if you have special spec. requirement , please feel free to contact our salesperson.

DIMENSION(mm)



PIN#	Function
1	Tri-State
2	GND
3	Output
4	VDD

Solder Pad Layout(mm)



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between Vdd and GND pads.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)\ppm	± 25	± 30	± 50
@-40~85°C	○	○	○
@-40~105°C	△	○	○
@-40~125°C	×	△	○

○: Available △: Conditional ×: Not available
 Inclusive of calibration @25°C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration.