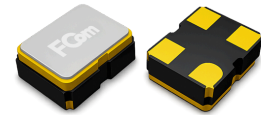


FCom Crystal Oscillator

Series FCO-2C-HP

High Precision Oscillator 2.5×2.0 mm



Feature

- Tight frequency stability:
 - ± 10 ppm over -40°C to 85°C
 - ± 15 ppm over -40°C to 95°C
- LVCOMS Output Logic
- Operation voltage: 1.8V, 2.5V, 3.3V
- Wide frequency range : 2.5MHz~60MHz

Application

- Wireless Connectivity
- Mobile device
- Smart meter

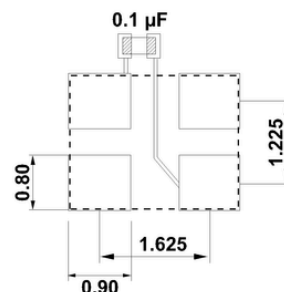
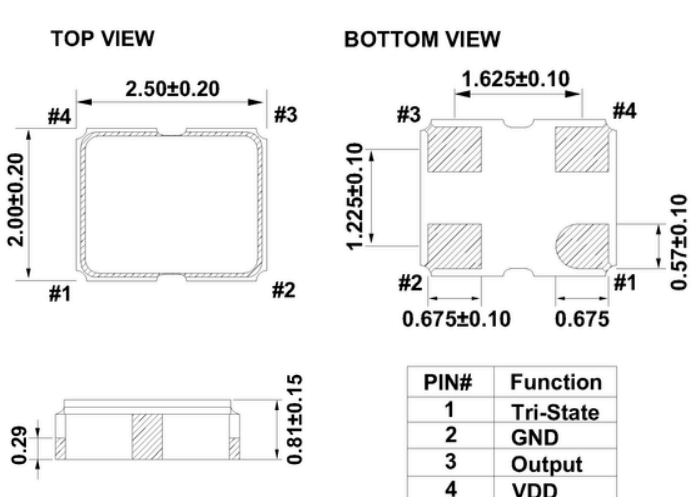
ELECTRICAL SPECIFICATIONS

Parameters		Symbol	Min.	Typ.	Max.	Units	Notes
Frequency Range		F	2.5~60			MHz	
Standard Frequency		F(ST)	24, 25, 32			MHz	
Supply Voltage		Vdd	1.8V	2.5V	3.3V	V	Typ.
Current Consumption	@15pF Load	Icc	4	5	6	mA	Max.
Duty Cycle		TH/T	40/60	45/55	45/55	%	
Transition Time	Rise Time	Tr/Tf	-	-	6	nSec	Max. @10% ~ 90%, load 15pF
	Fall Time		-	-	6		
Stand by Current		Icc(ST)	-	-	10	uA	
Output Load (CMOS)		CL	15			pF	
Output Level		VoH	90% Vdd	-	-	V	Output High
		VoL	-	-	10% Vdd	V	Output Low
Tri-State Mode (Input to Pin 1)		VIH	70% Vdd	-	-	V	Enable
		VIL	-	-	30% Vdd	V	Disable
RMS Phase Jitter		PJ	-	-	0.5	pSec	Integrated 12 KHz~20 MHz
Start-up Time		Tosc	-	-	2	mSec	
Aging		ppm/yr	± 3			ppm/yr	1st. Year at 25°C

Test condition
Ambient temperature:
 $25 \pm 5^{\circ}\text{C}$
Relative humidity:
 $40\% \sim 70\%$

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

DIMENSION(mm)



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	± 10	± 15	± 20
@-20~70°C	○	○	○
@-30~85°C	○	○	○
@-40~85°C	○	○	○
@-40~95°C	×	○	○

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