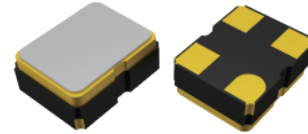


Crystal Oscillator, Series FCO-2C

SMD Crystal Oscillator 2.5×2.0 mm

FEATURE

- Typical 2.5×2.0×0.81mm SMD package
- Tight symmetry (45 to 55%) available
- Operation voltage: 1.8V, 2.5V, 3.3V
- Tri-state enable / disable
- RoHS compliant / Pb-free

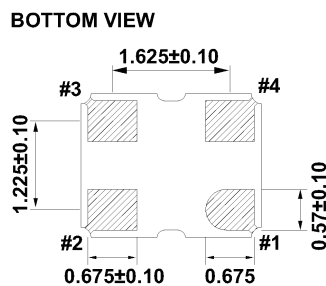
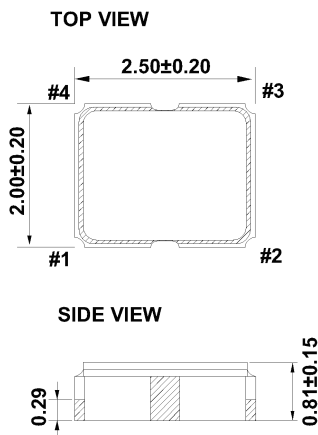


ELECTRICAL SPECIFICATIONS

Item	Specifications						Unit	
	3.3V		2.5V		1.8V			
Parameter	Min.	Max.	Min.	Max.	Min.	Max.		
Supply Voltage Variation	3.135	3.465	2.375	2.625	1.71	1.89	V	
Frequency Range	1.25	125	1.25	125	1.25	125	MHz	
Standard Frequency	24, 26, 30, 40						MHz	
Supply Current(At 15pF Load)	-	15	-	10	-	7	mA	
Duty Cycle	45	55	45	55	45	55	%	
Transition Time :Rise/Fall Time	1.25 MHz≤FO<10MHz		-	3	-	4	5	nSec
	10 MHz≤FO<125MHz		-	3	-	3	4	
Output Level	Out High		2.97		2.25		1.62	V
	Out Low		0.33		0.25		0.18	
Start Time	-	2	-	2	-	2	mSec	
Tri-State(Input to Pin 1)	Enable(High Voltage or floating)		2.31	-	1.75	-	1.26	V
	Disable(Low Voltage or GND)		-	0.99	-	0.75	0.54	
Period Jitter (Pk-Pk)	-	40	-	40	-	40	pSec	
RMS Phase Jitter (integrated 12kHz to 20MHz)	-	1	-	1	-	1	pSec	
Standby Current(@ -40 to 85°C)	-	10	-	10	-	10	μA	
Standby Current(@ -40 to 125°C)	-	20	-	20	-	20	μA	
Aging(@25 1st year)	-	±3	-	±3	-	±3	ppm	
Storage Temp. Range	-55	125	-55	125	-55	125	°C	

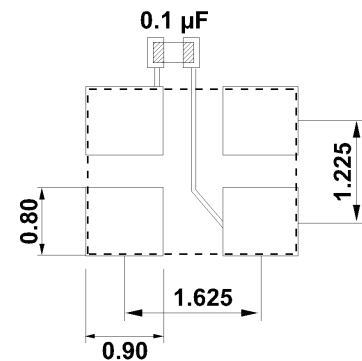
Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.
 + Transition times are measured between 10% and 90% of VDD, with an output load of 15pF.

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		
	±20	±25	±50
-10 ~ +60	○	○	○
-20 ~ +70	△	○	○
-40 ~ +85	×	○	○
-40 ~ +125	×	×	○

○: Available △: Conditional ×: Not available

Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration