

FCom Crystal Oscillator

Series FCO-7P-LE

Spread Spectrum Oscillator 7.0×5.0 mm



Feature

- Typical 7.0×5.0×1.4mm SMD package
- Reduces EMI by approx. 12dB ~ 18dB
- Operation voltage: 2.5V, 3.3V
- Tri-state enable/disable

Application

- IP Camera, LED Module
- Media Players, Surveillance
- Medical Equipments

ELECTRICAL SPECIFICATIONS

Parameters	Symbol	Min.	Typ.	Max.	Units	Notes
Frequency Range	F	3 ~ 200			MHz	Test condition Ambient temperature: 25 ± 5°C Relative humidity: 40% ~ 70%
Standard Frequency	F(ST)	24, 25			MHz	
Modulation Carrier Frequency	Mf	30	-	40	kHz	
Supply Voltage	Vdd	-	2.5V	3.3V	V	
Current Consumption	3 ~ 100 MHz	Icc	-	20	mA	
	101 ~ 200 MHz	Icc	-	30	mA	
Transition Time:	Rise Time	Tr/Tf	-	5	nSec	
	Fall Time		-	5	nSec	
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
Duty Cycle	TH/T	45	~	55	%	
Start-up Time	Tosc	-	-	100	nSec	Start from t= 0 to 90% Vdd
Aging	ppm/yr	±3			ppm/yr	1st. Year at 25°C

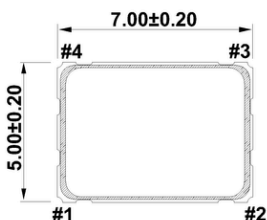
Note : The table shows common spec. if you have special spec. requirement , please feel free to contact our salesperson.

SPREAD TABLE

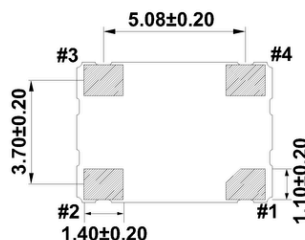
Spread Type	
Down Spread	-0.25% to -4.0% in 0.25% steps
Center Spread	±0.125% to ±2.0% in ±0.125% steps

DIMENSION(mm)

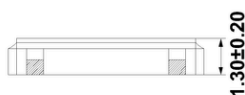
TOP VIEW



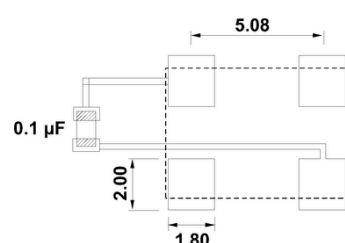
BOTTOM VIEW



SIDE VIEW



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	± 50
@-20~70°C	○	○	○
@-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.