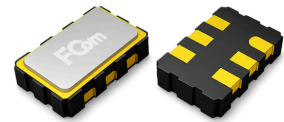


FCom VCXO

Series FVC-5X

Standard VCXO 5.0×3.2 mm



Feature

- Typical 5.0×3.2×1.25mm 6 pads ceramic SMD package
- Tight symmetry (45 to 55%) available
- Output frequency up to 170MHz
- Tri-state enable/disable

Application

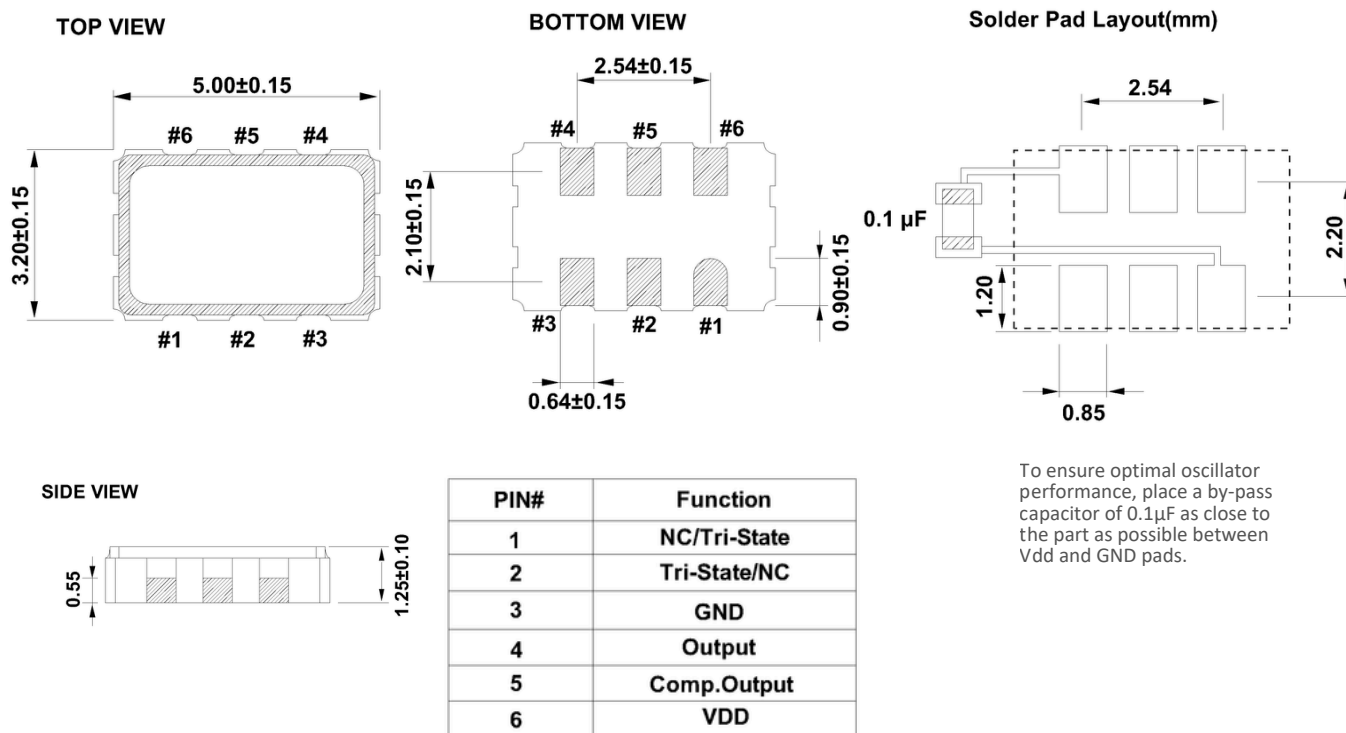
- Set-top Box, HDTV
- WiMAX/WLAN
- xDSL/ VoIP
- Cable modem

ELECTRICAL SPECIFICATIONS

Parameters		Symbol	CMOS		Units	Notes	
			3.3V				
			Min.	Max.			
Frequency Range		F	1.5~170		MHz		Test condition Ambient temperature: 25 ± 5℃ Relative humidity: 40% ~ 70%
Supply Current	1.5≦Fo<20 MHz	Icc	-	10	mA		
	120≦Fo<50 MHz		-	20			
	50≦Fo<170 MHz		-	30			
Absolute Pulling Range		APR	±50	-	ppm		
Control Voltage Range		Vc	0.3	3.0	V		
Transition Time Rise/Fall Time	1.5≦Fo<20 MHz	Tr/Tf	-	5.0	nSec	Between 10% and 90% of VDD, with an output load of 15pF	
	20≦Fo<50 MHz		-	4.0			
	50≦Fo<170 MHz		-	3.0			
Output Level		VoH	2.97	-	V	Output High	
		VoL	-	0.33	V	Output Low	
Tri-State Mode (Input to Pin 2)		VIH	70% Vdd	-	V	Enable	
		VIL	-	30% Vdd	V	Disable	
Phase Noise		PN	Typ.	Max.	dBc/Hz	@38.4MHz	
100 Hz			-100	-			
1 kHz			-133	-			
10 kHz			-140	-			
RMS Phase Jitter	12kHz~20MHz	PJ		1	pSec		
Period Jitter		Pk	-	40	pSec		
Linearity			-	10	%		
Modulation Bandwidth		BW	15	-	kHz	1.5≦Fo<170 MHz	
Input Impedance			10000	-	kΩ		
Start-up Time		Tosc	2		mSec	Max	
Aging			±3		ppm/yr.	@ 25℃ 1st year	

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

DIMENSION(mm)



To ensure optimal oscillator performance, place a by-pass capacitor of $0.1 \mu\text{F}$ as close to the part as possible between Vdd and GND pads.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C) \ ppm	± 25	± 50
@-10~60°C	○	○
@-20~70°C	○	○
@-40~85°C	△	○
@-40~105°C	×	○

○: Available △: Conditional ×: Not available

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