

# FC3-Series 3.20 x 2.50 x 1.00 (mm)



Wi2Wi's FC3-Series "Fast Turn" clock oscillators are ideally suited for use in Telecom, Ethernet and Fiber Channel applications, as well as High Speed Video, Graphics, Test and Measurement Equipment, and Aviation including MIL temperature ranges. Wi2Wi provides "Fast" sampling for your proto-typing needs in days, with mass production quantities in just a few weeks.

## Wi2Wi, LLC

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### • Features

1. Miniature **3.2 x 2.5 x 1.0mm** hermetically sealed package.
2. **LVC MOS, LVDS** or **LVPECL** Output with **Tri-state** function available.
3. Low **Jitter** and **Phase Noise**.
4. **RoHS** and **REACH** Compliant.



### • Electrical Specifications

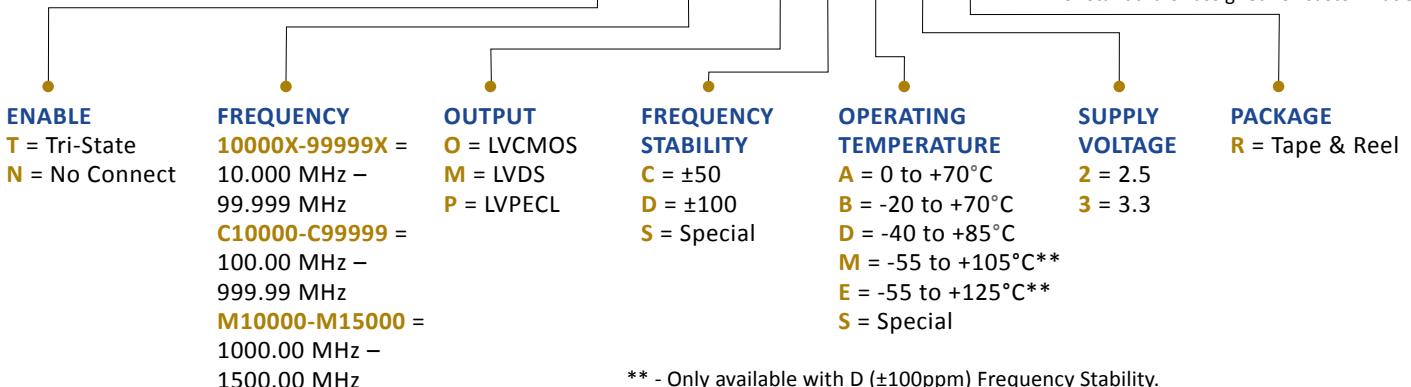
Parameter		Supply Voltage (±10%)		Units V
		3.3	2.5	
Frequency Range	Low (LVC MOS/LVDS/LVPECL)	10.000000		MHz
	High (LVC MOS)	200.000000		
	High (LVDS/LVPECL)	1500.000000		
Frequency Stability (Please Specify)	All Causes (Maximum ) <sup>*1</sup>	±50 , ±100		ppm
Temperature Range (Please Specify)	Operating	0 to +70 , -20 to +70 , -40 to +85		°C
	Storage	-55 to +125		°C
Supply Current (Maximum, no Load)		25 (LVC MOS) , 65 (LVDS/LVPECL)		mA
Load		See Load/Test Circuits (Page 2)		
Duty Cycle (at 50% Vcc)		45 to 55		%
Rise/Fall Times (Maximum under Load)		3.0 (LVC MOS) , 0.6 (LVDS/LVPECL)		nS
Start up Time (Maximum)		15.0		mS
Output Voltage Levels (LVC MOS)		90 Min (High) , 10 Max (Low)		% Vcc
Output Voltage Levels (LVDS)	High	1.43 Typ , 1.60 Max		V
	Low	0.90 Min , 1.10 Typ		
	Differential Voltage	250 Min , 350 Typ , 450 Max		
Output Voltage Levels (LVPECL)	High	Vcc-1.025 Min , Vcc-0.95 Typ , Vcc-0.88 Max		V
	Low	Vcc-1.810 Min , Vcc-1.70 Typ , Vcc-1.62 Max		
	Differential Voltage	595 Min , 750 Typ , 930 Max		
Pin 1 (Tri-State Option Only)	Enable	80		% Vcc
	Tri-State (Disable)	10		% Vcc
Phase Jitter Maximum (rms)	Fractional Divider (12KHz to 20MHz)	0.6		pS
	Integer Divider (12KHz to 20MHz)	0.4		
Period Jitter Maximum (rms)		2.5		pS

\*1 - Inclusive of Tolerance @25°C, Operating Temperature, Supply Voltage, Load, 1st Year Aging, Shock and Vibration.

### • Part Numbering Guide

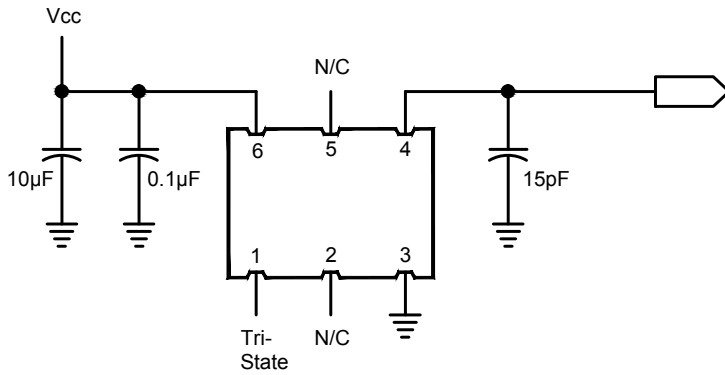
ex) **FC3-T-25000X-C-C-D-3-R-X\***

\* - for standard or assigned for customization.

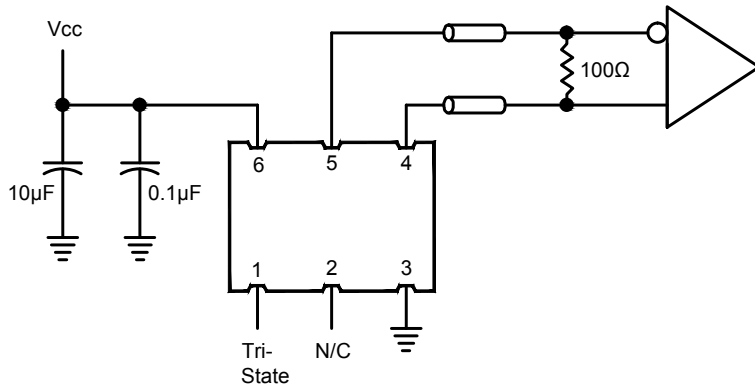


\*\* - Only available with D (±100ppm) Frequency Stability.

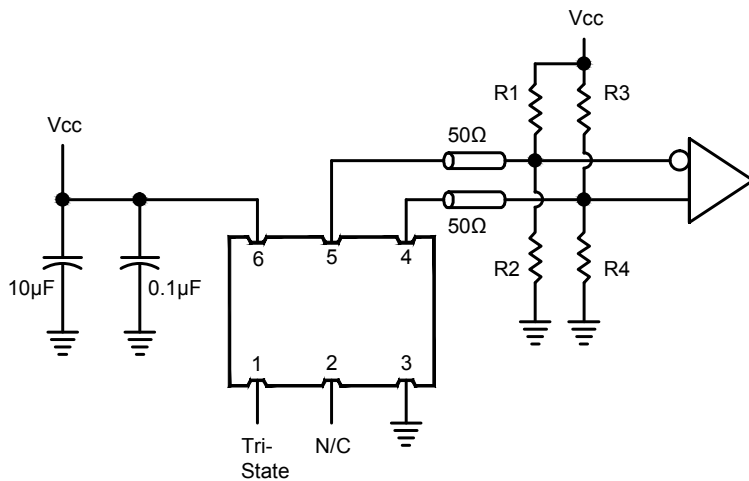
## Load/Test Circuits



LVCMOS Test Circuit



LVDS Test Circuit



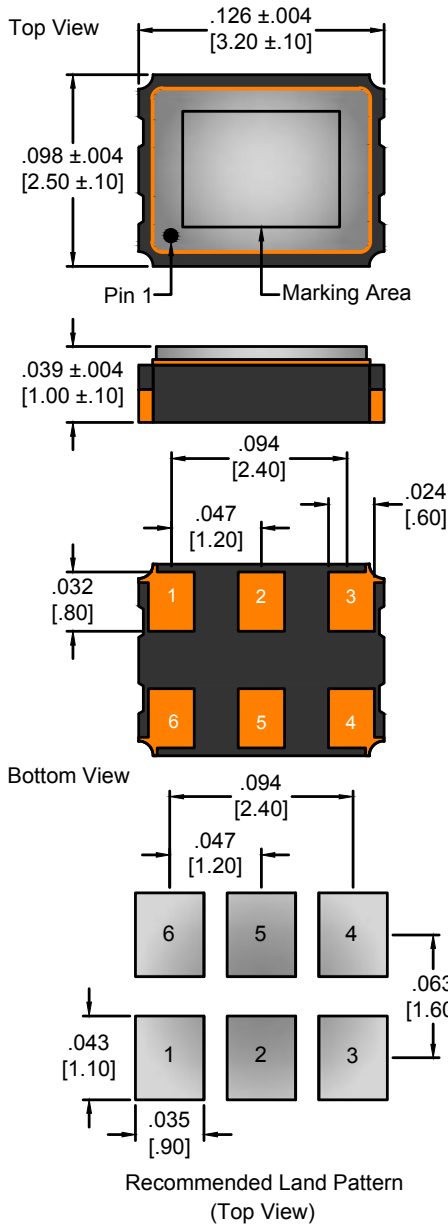
LVPECL Test Circuit

Vcc @ 3.3V: R1/R3 = 127Ω , R2/R4 = 82.5Ω  
 Vcc @ 2.5V: R1/R3 = 250Ω , R2/R4 = 62.5Ω

# FC3-Series 3.20 x 2.50 x 1.00 (mm)

## • PACKAGE DIMENSIONS

Tolerance:  $\pm 0.008$  [.20mm] (Unless otherwise specified)

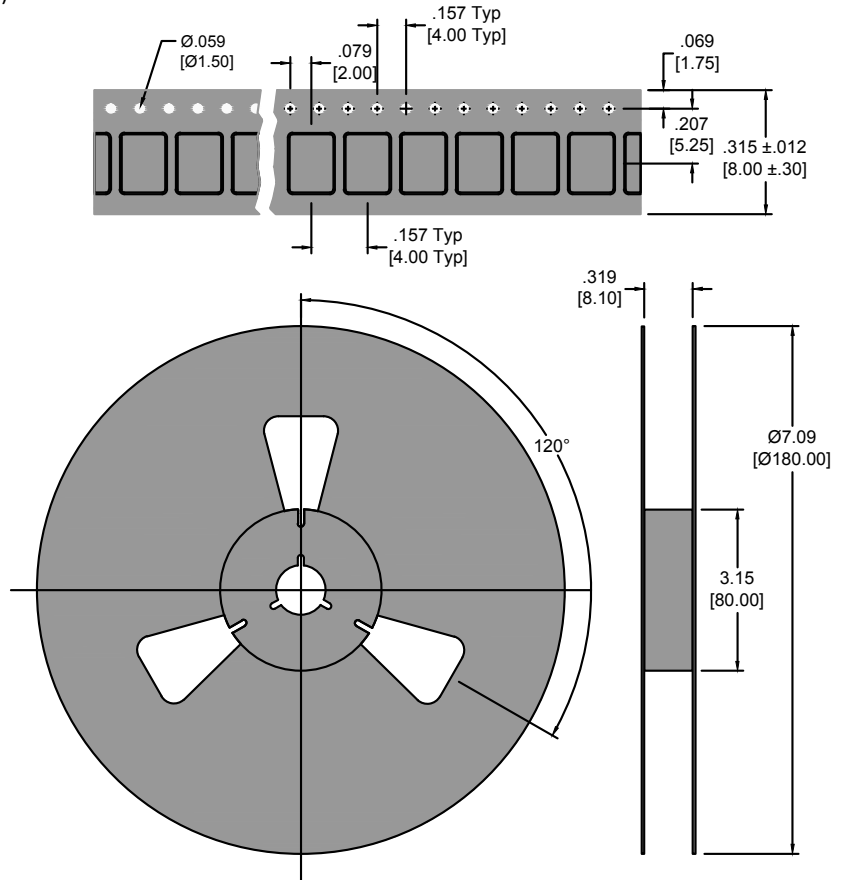


PIN	CONNECTION
1	Tri-state or No Connect
2	No Connect
3	Ground/Case
4	Output
5	Complementary Output (LVDS & LVPECL) No Connect (LVCMOS)
6	Supply Voltage

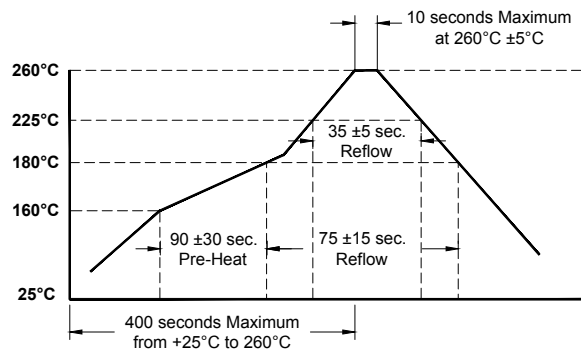
### Contacts:

Electro Au, 11.8 to 40.0  $\mu$ inches (.30 to 1.0  $\mu$ m) over  
 Electro Ni, 50 to 350  $\mu$ inches (1.27 to 8.89  $\mu$ m)

## • TAPE & REEL



## • REFLOW PROFILE



All product is supplied **RoHS and REACH** compliant.  
 Specifications subject to change without notice.