

Ceramic Surface Mount (VC)TCXO

- MIL-PRF-55310D Class B or Class S
- Low Phase noise
- Excellent Frequency Stability
- Low power consumption

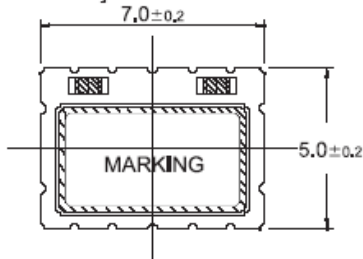
Applications

- * Communications
- * Routers
- * Switches
- * WAN Interfaces
- * Aerospace
- * Military/Space

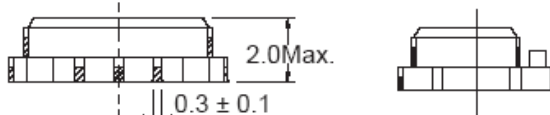
Part Numbering Example: FTC6LCETCM - XX.XXXX M

FTC6	L	C	E	T	C	M	22.5792M
SERIES	STABILITY	OPERATING TEMP.	VOLTAGE	ABSOLUTE PULL	OUTPUT	GRADE	FREQUENCY
	G= ± 2.5 ppm H= ± 2.0 ppm J= ± 1.5 ppm K= ± 1.0 ppm L= ± 0.5 ppm	C= -10 °C to 60 °C D= -20 °C to 70 °C F= -30 °C to 85 °C G= -40 °C to 85 °C	D = 5.0V E = 3.3V	T= TCXO A= ± 10 ppm B= ± 8 ppm C= ± 5 ppm	C =CMOS N=Cipped Sine	I =Industrial Std M=MIL-STD-883B B=MILPFR55310D	10 ~40.000 MHz

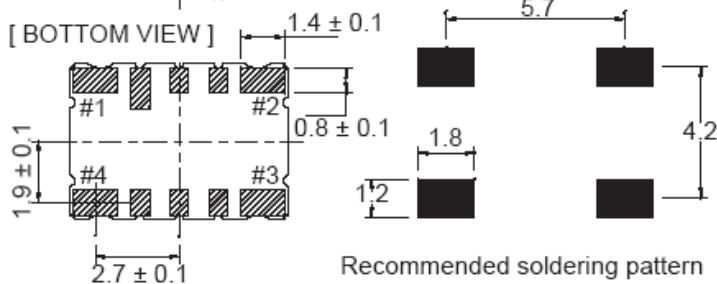
[TOP VIEW]



[SIDE VIEW]



[BOTTOM VIEW]



PIN	Specification
1	Vc or N/C or Gnd
2	GND
3	Output
4	Vcc

Freq. Vs Temp Availability

Temp (°C)	L: ± 0.5 ppm	K: ± 1.0 ppm	J: ± 1.5 ppm	H: ± 2.0 ppm	G: ± 2.5 ppm
C: -10°C to +60°C	♦	♦	♦	♦	♦
D: -20°C to +70°C	♦	♦	♦	♦	♦
F: -30°C to +85°C	o	♦	♦	♦	♦
G: -40°C to +85°C	o	♦	♦	♦	♦

o case by case

♦ available

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Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Frequency Range	F		10		40	MHz	
Initial accuracy		@25 °C	-1.0		+1.0	ppm	For TCXO only
Frequency Stability	$\Delta F/F$	Vs. Operating Temperature	± 0.5		± 2.5	ppm	
		Vs. Supply Voltage Vs. Aging / Year		± 0.2 ± 1		ppm/V ppm	
Operating Temperature Range	T		0 ° -40 °		+70 ° +85 °	°C	
Output Load		Clipped Sine	0.8Vp-p minimum				
		10K Ω /10pF					
Supply Voltage	V _{CC}	External 150pF decoupling capacitor recommended	4.75 3.15	5.00 3.30	5.25 3.45	V	
Voltage Control	V _C		0.5 0.5		4.5 2.5	V	
Input Impedance			1M			Ω	
Pullability						ppm	See Ordering Information
Deviation slope		Monotonic positive					
Linearity Modulation BW			-10		+10	ppm/V	
			10			KHz	3dB BW
SSB Phase Noise		@100 Hz @ 1 KHz @10 KHz		-115 -135 -150		dBc/Hz	F ₀ =13MHz
Start up					2	ms	

Environmental Specifications

Test	Test Method	Test Condition
Electrical Characteristics	Internal Specification	Per Specification
Frequency vs. Temperature	Internal Specification	Per Specification
Mechanical Shock	MIL-STD-202, Method 213, C	100 g's
Vibration	MIL-STD-202, Method 201-204	10 g's from 10-2000 Hz
Thermal Cycle	MIL-STD-883, Method 1010, B	-55 Deg. C to +125 Deg. C, 15 minute Dwell, 10 cycles
Aging	Internal Specification	168 Hours at 105 Degrees C
Gross Leak	MIL-STD-202, Method 112	30 Second Immersion
Fine Leak	MIL-STD-202, Method 112	Must meet 1×10^{-5}
Solderability	MIL-STD-883, Method 2003	8 Hour Steam Age – Must Exhibit 95% coverage
Resistance to Solvents	MIL-STD-883, Method 2015	Three 1 minute soaks
Terminal Pull	MIL-STD-883, Method 2004, A	2 Pounds
Lead Bend	MIL-STD-883, Method 2004, B1	1 Bending Cycle
Physical Dimensions	MIL-STD-883, Method 2016	Per Specification
Internal Visual	Internal Specification	Per Internal Specification