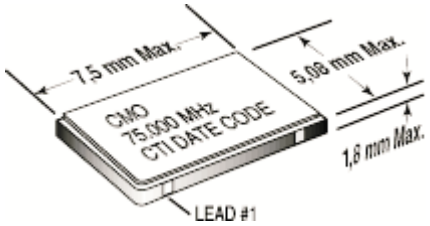
3.3V 5x7mm Surface Mount Crystal Clock Oscillators

- CMOS Compatible
- Tri-State Feature for Auto Test Systems
- Tape & Reel Packaging
- ±20ppm Available - Please Contact Factory



ELECTRICAL SPECIFICATIONS

MODEL	CMO3			
Frequency Range (MHz)	1.5 to 156.250			
Frequency Stability (ppm)				
Overall (Typical)	Inclusive of calibration, temperature, voltage, load, shock,vibration, aging			
0°C to 70°C	±25			
-40°C to +85°C	±50			
Temperature Range (°C)				
Operating	-40°C to +85°C			
Storage	-40°C to +125°C			
Supply Voltage (V)	+3.3 ±10%			
Input Current (mA)	1.5MHz to 35MHz	>35MHz to 50MHz	>50MHz to 100MHz	>100MHz to 156.25MHz
	<10	<15	<25	<30
Symmetry (%) CMOS	45/55			
Transistion Times	1.5MHz to 50MHz		>50MHz to 156.250MHz	
Rise Time (ns)	<5		<3	
Fall Time (ns)	<5		<3	
Load	15pF			
"0" Level (V_{OL})	0.3			
"1" Level (V_{OH})	3.0			
Start up Time (ms)	<10			

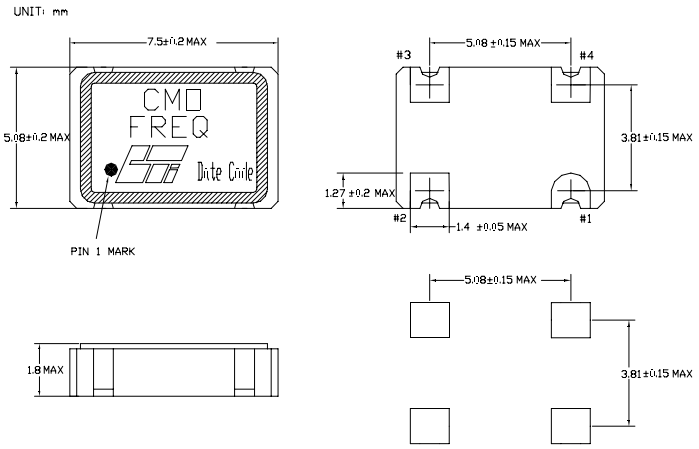
PART NUMBERING GUIDE

CMO3XXXC - Specify Frequency

- "Blank" = 0°C to 70°C Operating Temp.
- "M" = -40°C to 85°C Operating Temp.
- "A" = ±25ppm (-40°C to 85°C Excluding Aging)
- "B" = ±50ppm
- "C" = ±100ppm
- "D" = ±20ppm Excluding Aging (Contact Factory)
- "Blank" = Fixed Frequency
- "E" = Tri-State

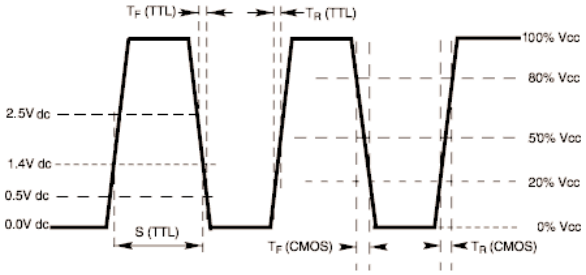
2553 N. Edgington Street, Franklin Park, IL 60131 • Phone: 847.451.1000 • Fax: 847.451.7585

800-888-1499 or www.champtech.com

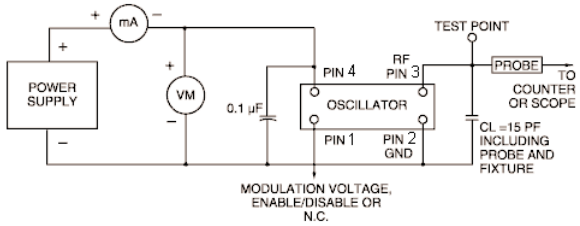


PIN	FUNCTION
1	N/C / Tri-State
2	Ground
3	Output
4	+ V_{CC}

OUTPUT WAVEFORM



TEST CIRCUIT DIAGRAM



MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

TEST METHODS	REFERENCE PROCEDURES	DESCRIPTION
Temperature Cycle	MIL-STD-833, Mtd 1010, Cond. B	-55°C to +125°C; Air-to-Air; 100 cycles; 10 min. dwell
Mechanical Shock	MIL-STD-883, Mtd 2002, Cond. B	1500 g's
Vibration	MIL-STD 883, Mtd 2007, Cond. B	20-2000 Hz; 0.06 inch; 15g's; 3 planes
Humidity Steady State	MIL-STD-202, Mtd 103	40°C; 90%-95% R.H.; 56 days
Thermal Shock	MIL-STD-883, Mtd 1011.7 Cond. B	100°C to 0°C; Water-to-Water; 15 cycles
Electrostatic Discharge	MIL-STD-883, Mtd 3015 Class II	2 KV to 4 KV Threshold
Solderability	MIL-STD-883, Mtd 2022.2	Solder dip; Meniscograph Criteria
Hermeticity	MIL-STD-883, Mtd 1014.8, Cond. A1	Mass spectro. 2 x 10-8 atmos. CC/sec He
Resistance to Soldering	MIL-STD-202, Mtd 210D, Cond. J	235°C; 30 seconds
Lead Integrity	MIL-STD-883, Mtd 2004.5, Cond. A, B1	Lead tension & bend stress
Marking Permanence	MIL-STD-883, Mtd 2015.8	Resistance to solvents
Life Test	MIL-STD-883, Mtd 1005.6	125°C, powered, 1000 hours minimum