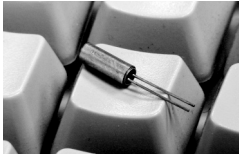


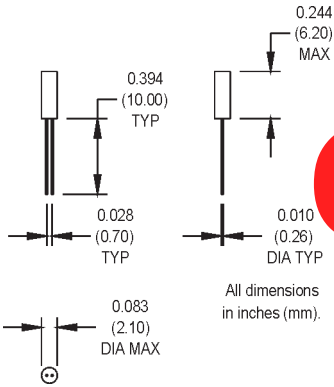
MMCC-2 and MMCC-3 Tuning Fork Crystals



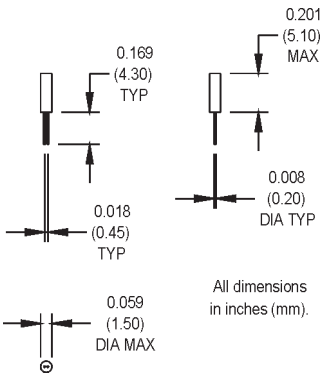
Precision 32.768 kHz quartz crystals for realtime applications

The majority of applications use a 32.768 kHz crystal in an oscillator circuit incorporating binary division to produce a 1 Hz output.

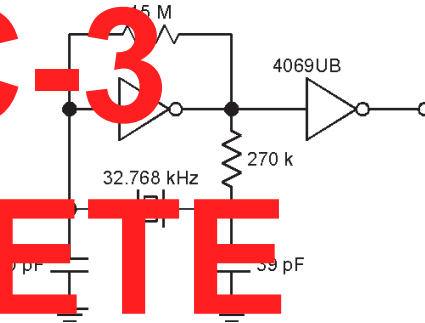
*MMCC-2-R



*MMCC-3-R

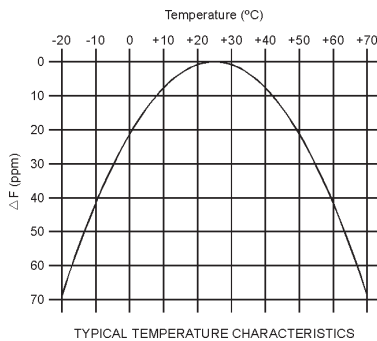


MMCC-3 OBSOLETE



PARAMETERS		VALUE
Frequency		32.768 kHz
Tolerance @ +25 °C		±30 ppm
Aging		±3 ppm/yr. Max.
Shunt Capacitance MMCC-2		1.35 pF, Typical
MMCC-3		1 pF, Typical
Load Capacitance MMCC-2		12.5 pF, Typical
MMCC-3		8.0 pF, Typical
Standard Operating Conditions		See Table 1
Storage Temperature		-40 °C to +85 °C
Equivalent Series Resistance (ESR), Max.		
MMCC-2		35 Kohms
MMCC-3		40 Kohms
Resonance		Parallel
Quality Factor		70,000 Min.
Turnover Temperature		+25 °C to ±5 °C
Parabolic Curvature Constant		-0.034 ppm/°C ² , Typical
Drive Level		1.0 μW Max.
Environmental		
Holder		Compression seal
Mechanical Shock		MIL-STD-202, Method 213, C
Vibration		MIL-STD-202, Method 201 & 204
Thermal Cycle		MIL-STD-883, Method 1010, B
Maximum Wave Soldering Conditions		+260 °C for 10 secs.

Table 1



* Series resonant designated by "SR" prefix (i.e., SRMMCC-1).
Use MtronPTI part number 375-05A for ±20 ppm tolerance (MMCC-2).
Contact the factory for specifications not listed.

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.