

C18xx Model

5X7 mm SMD, 1.8V, LVCMOS

Lead Free
RoHS
Compliant

Clock Oscillator



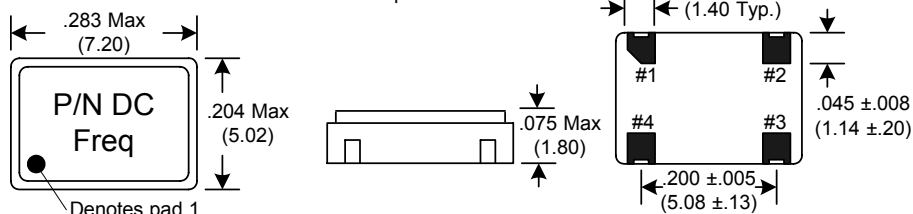
Frequency Range: 1MHz to 100MHz
Frequency Stability: $\pm 20\text{ppm}$ to $\pm 100\text{ppm}$
Temperature Range:
 Operating: 0°C to 70°C
 (Option M) -20°C to 70°C
Storage: -55°C to 120°C
Input Voltage: $1.8\text{V} \pm 0.2\text{V}$
Input Current: 30mA Max @ 15pF
Output: LVCMOS
 Symmetry: 45/55% Max @ 50% Vdd
 Rise/Fall Time: 1ns Typ, 3.5ns Max
 Logic: "0" = 10% Vdd Max
 "1" = 90% Vdd Min
 Load: 15pF Max
Jitter RMS: 12KHz~20MHz 0.5ps Typ, 1ps Max

Designed to meet today's requirements for low voltage applications. The power saving sleep function of the C18xx turns the oscillator circuit off for maximum efficiency. Available on 16mm tape and reel in quantities of 1K.

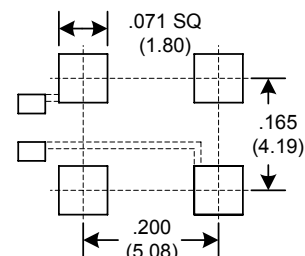
Aging: <3ppm 1st/yr, 1ppm every year thereafter

Dimensions inches (mm)

All dimensions are Max unless otherwise specified.

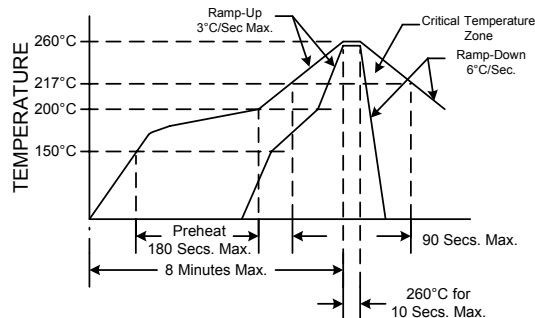


SUGGESTED PAD LAYOUT

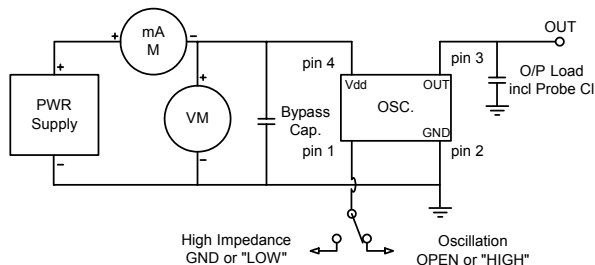


0.01uF Bypass Capacitor Recommended

RECOMMENDED REFLOW SOLDERING PROFILE



NOTE: Reflow Profile with 240°C peak also acceptable.



Crystek Part Number Guide

Example: C1892-44.736MHZ
 Example: CM1892-44.736MHZ

Temperature		Frequency Stability	
0/ 70°C	-20/ 70°C	-40/ 85°C	
C1890	CM1890	CE1890	+/- 100ppm
C1892	CM1892	CE1892	+/- 50ppm
C1891	CM1891	CE1891	+/- 25ppm
C1898	NA	NA	+/- 20ppm

Tri-State Function

Function pin 1	Output pin
Open	Active
"1" level 0.7V Min	Active
"0" level 0.3V Max	High Z

Specifications subject to change without notice.

TD-02061 Rev.H



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