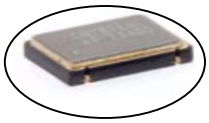
# Clock Oscillator

## C18xx Model
5×7 mm SMD, 1.8V, LVCMOS

RoHS Compliant

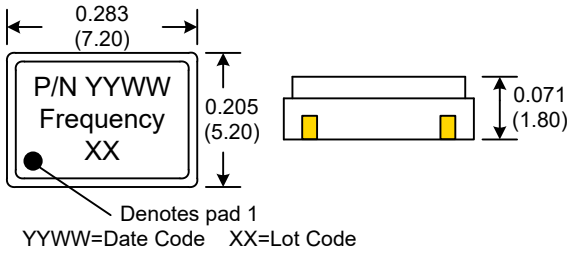


| | |
|---|---|
| **Frequency Range:** | 1.544 MHz to 110.000 MHz |
| **Frequency Stability:** | ±20ppm to ±100ppm |
| **Temperature Range:** | |
| Operating: | 0°C to 70°C |
| (Option M) | -20°C to 70°C |
| (Option E) | -40°C to 85°C |
| **Storage Temperature:** | -45°C to 90°C |
| **Input Voltage:** | 1.8V ±0.2V |
| **Input Current:** | 30mA Max @ 15pF |
| **Standby Current:** | 10uA Max |
| **Output:** | LVCMOS |
| Symmetry: | 45/55% Max @ 50% Vdd |
| Rise/Fall Time: | 1ns Typical, 3.5ns Max |
| Logic: | "0" = 10% Vdd Max |
| | "1" = 90% Vdd Min |
| Load: | 15pF |
| **Jitter RMS:** 12kHz~20MHz | 0.5ps Typical, 1ps Max |
| **Aging:** | <3ppm 1st year, 1ppm every year thereafter |

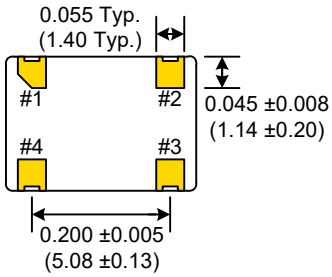
Designed to meet today's requirements for low voltage applications. The power saving sleep function of the C18xx turns the oscillator circuit off for maximum efficiency. Available on 16mm tape and reel in quantities of 1K.

Dimensions inches (mm)

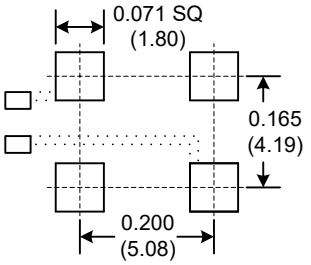
All dimensions are Max unless otherwise specified.




YYWW=Date Code XX=Lot Code

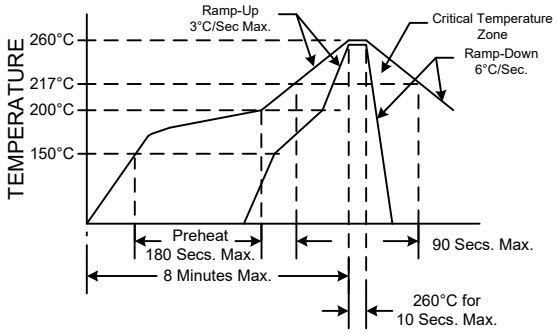



**SUGGESTED PAD LAYOUT**



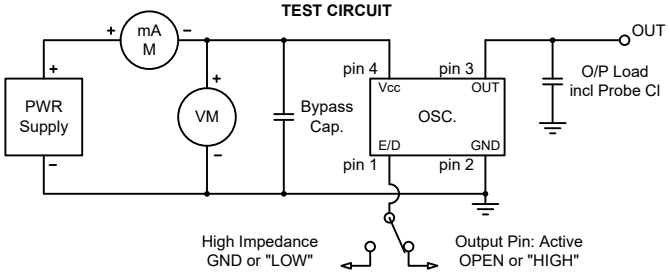

0.01uF Bypass Capacitor Recommended

**RECOMMENDED REFLOW SOLDERING PROFILE**




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

**TEST CIRCUIT**




## 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 |

| Enable/Disable | |
|---|---|
| Function pin 1 | Output pin |
| Open | Active |
| "1" level 0.7×Vcc Min | Active |
| "0" level 0.3×Vcc Max | High Z |

Rev: S
Date: 19-Jan-2017


Specifications subject to change without notice.

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