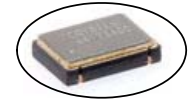


**CUSO33xx Model**  
3.2X5 mm SMD, **3.3V, CMOS**



# Clock Oscillator

**Frequency Range:** 1.544MHz to 106.25MHz  
**Frequency Stability:** ±25ppm 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:** -55°C to 120°C  
**Input Voltage:** 3.3V ± 0.3V  
**Input Current:** <30MHz 4-10mA (freq. dependent)  
 >31MHz 10-20mA (freq. dependent)  
**Standby Mode:** 5uA Max  
**Output:** CMOS  
 Symmetry: 45/55% Max @ 50% Vdd  
 Rise/Fall Time: 2ns Typ., 4ns Max  
 Logic: "0" = 10% Vdd Max  
 "1" = 90% Vdd Min  
 Load: 15pF Max  
**Jitter:** 12KHz to 20MHz 0.5ps Typ, 1ps Max RMS

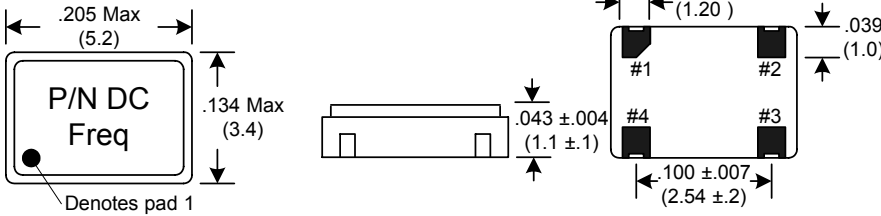


Designed to meet application requirements for smaller layout areas. The CUSO (Crystek Ultra Small Oscillator) Series utilizes fundamental and 3rd overtone crystal design thereby providing the proven performance of our larger 5x7mm package. Standby mode and Power-save Pull-up Resistance is standard. Packaged on tape and reel in quantities of 1K.

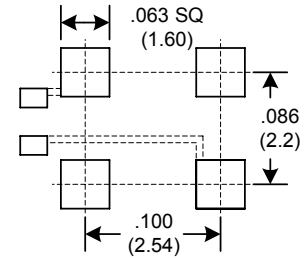
**Aging:** <3ppm 1st/yr, 1ppm every year thereafter

Dimensions inches (mm)

All dimensions are Max unless otherwise specified.

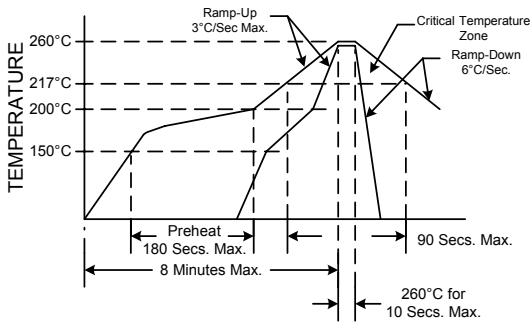


**SUGGESTED PAD LAYOUT**



0.01uF Bypass Capacitor Recommended

**RECOMMENDED REFLOW SOLDERING PROFILE**

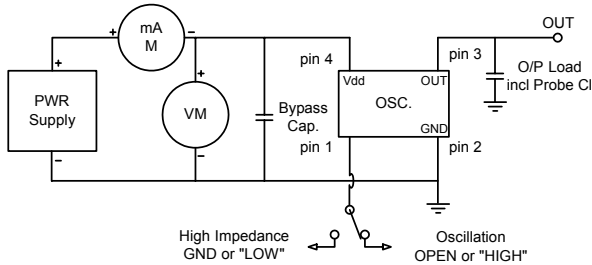


NOTE: Reflow Profile with 240°C peak also acceptable.

**Crystek Part Number Guide**

Example: CUSO3392-44.736  
 Example: CUSOM3392-44.736  
 Example: CUSOE3392-44.736

Temperature			Frequency Stability
0/ 70°C	-20/ 70°C	-40/ 85°C	
CUSO3390	CUSOM3390	CUSOE3390	+/- 100ppm
CUSO3392	CUSOM3392	CUSOE3392	+/- 50ppm
CUSO3391	CUSOM3391	CUSOE3391	+/- 25ppm



**Standby Function**

Function pin 1	Output pin	Oscillator State
Open	Active	Normal Operation
"1" level .7Vcc Min	Active	Normal Operation
"0" level .3Vcc Max	High Z	Stopped

Specifications subject to change without notice.

TD-021102 Rev. C



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