

## SURFACE MOUNT QUARTZ CRYSTALS

## Delivery Options

- ## Holder Style

- ## General Specifications

- ## Packaging

- ### Standard Frequencies

- 12.0MHz, 14.318180MHz, 14.74560MHz, 16.0MHz, 18.4320MHz, 19.20MHz, 19.66080MHz, 20.0MHz, 24.0MHz, 25.0MHz, 27.0MHz, 28.2240MHz, 30.0MHz, 32.0MHz, 33.3330MHz, 40.0MHz, 48.0MHz, 56.4480MHz

## Standard Frequency Tolerances and Stabilities

- $\pm 50\text{ppm}$ ,  $\pm 100\text{ppm}$

### Operating Temperature Range

- $-10$  to  $60^{\circ}\text{C}$

### Storage Temperature Range

- -30 to 85°C

### Marking

- Frequency only

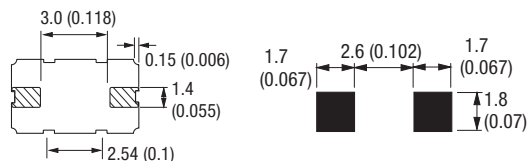
### Minimum Order Information Required

- Frequency + Holder + Frequency Tolerance @ 25°C  
+ Frequency Stability + Operating Temperature  
Range + Circuit Condition + Overtone Order

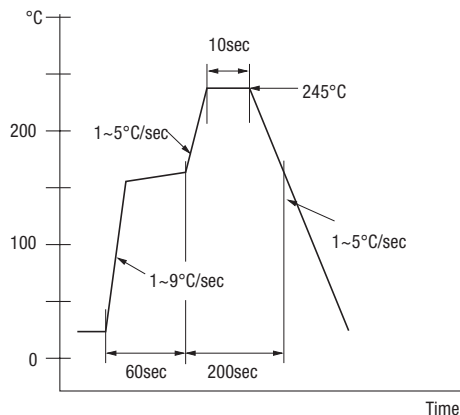
Technical drawing of the 1000 Series PCB showing top and side views with dimensions:

- Top View Dimensions:
  - Length:  $5.0 \pm 0.2$  (0.197  $\pm$  0.008)
  - Width:  $3.2 \pm 0.2$  (0.126  $\pm$  0.008)
- Side View Dimensions:
  - Thickness:  $0.8 \pm 0.2$  (0.031  $\pm$  0.008)

Actual Size



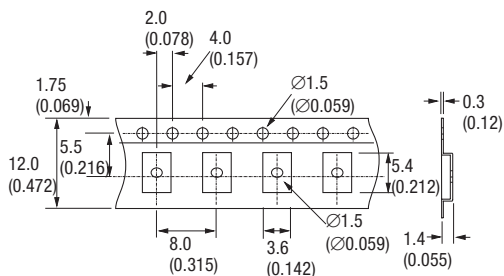
### Typical Solder Condition - Infrared Reflow



# **Electrical Specification - maximum limiting values**

| Frequency Range  | Frequency Tolerance<br>@ 25°C ±2°C | Operating<br>Temperature Range | Frequency Stability<br>Available Over<br>Operating Temperature | ESR<br>Max | Vibration<br>Mode     |
|------------------|------------------------------------|--------------------------------|--|------------|-----------------------|
| 12.0 to <14.0MHz | ±50ppm                             | -10 to 60°C                    | ±100ppm  | 140Ω       | Fundamental<br>AT cut |
| 14.0 to <16.0MHz | ±50ppm                             | -10 to 60°C                    | ±100ppm  | 90Ω        | Fundamental<br>AT cut |
| 16.0 to 67.0MHz  | ±50ppm                             | -10 to 60°C                    | ±100ppm  | 60Ω        | Fundamental<br>BT cut |

## **Outline in mm (inches) - Tape**



## **Outline in mm (inches) - Reel (scale 1:5)**

