



# PRECISION DEVICES

Frequency Control Solutions

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## GENERAL CRYSTAL SPECIFICATION : C8

### Frequency Range

: 4.000 000 to 50.000 000 MHz.  
Operating Mode : Fundamental, AT-Cut.

: 40.000 000 to 80.000 000 MHz.  
3<sup>rd</sup> Overtone, AT-Cut.

### Frequency Tolerances

Calibration at + 25.0 °C ( Maximum ) : ± 10.0 ppm, ± 30.0 ppm, ± 50.0 ppm.  
Over Temperature Range ( Maximum ) : ± 10.0 ppm, ± 30.0 ppm, ± 50.0 ppm.  
Aging ( Maximum per year at + 25.0 °C ) : ± 5.0 ppm.

### Temperature Range

Operating : - 20 to + 70 °C ( - 40 to + 85 °C option ).  
Storage : - 40 to + 85 °C.

### Motional Parameters

Load Capacitance ( CL ) : 10.0 pF to Series.

ESR ( Maximum )

4.000 000 to 7.199 999 MHz : 300 Ω.  
7.200 000 to 9.999 999 MHz : 200 Ω.  
10.000 000 to 10.999 999 MHz : 100 Ω.  
11.000 000 to 11.999 999 MHz : 80 Ω.  
12.000 000 to 50.000 000 MHz : 50 Ω.

70 Ω.

Shunt Capacitance ( C0 ) ( Maximum )

: 7.0 pF.

Drive Level ( Maximum )

: 300.0 μW ( 100.0 μW Typical, 10.0 μW Minimum ).

Insulation Resistance

: 500 MΩ Minimum at 100 V<sub>DC</sub>.

### Package Style

: 8.00 x 4.50 x 1.60 mm.

### Marking

Line 1

: PDI

Line 2

: Spec. code

### Notes

Terminals are Au.

All product is supplied RoHS compliant.

Product can be supplied on Tape and Reel, on reels of 1,000 units.

Not all Frequency / Temperature combinations are available.

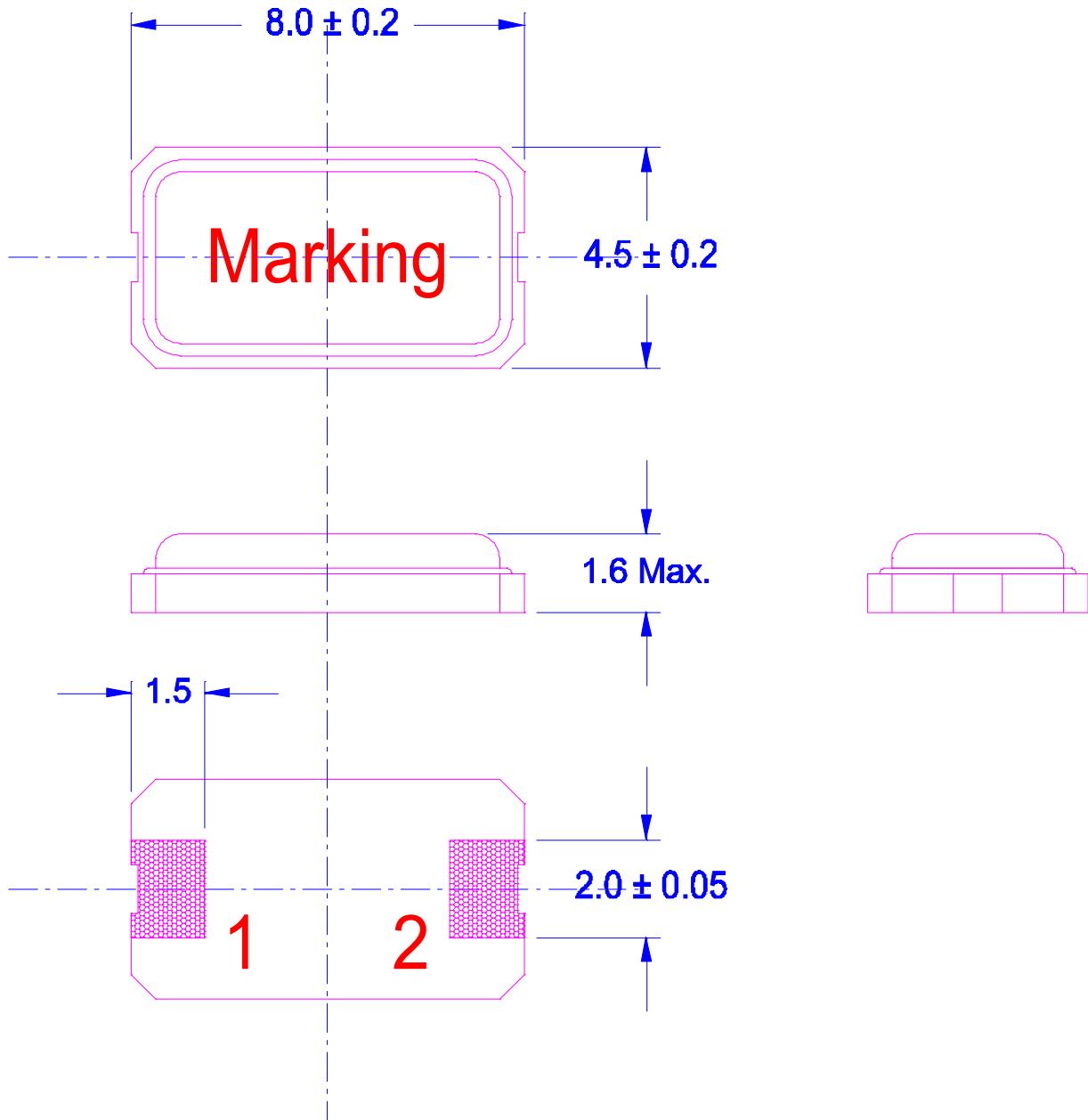
Specifications subject to change without notice.



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Package Drawing



Pin Connections

- 1 Xtal
- 2 Xtal

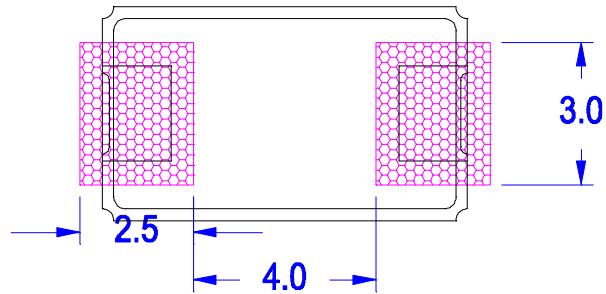
All Dimensions and Tolerances are in mm



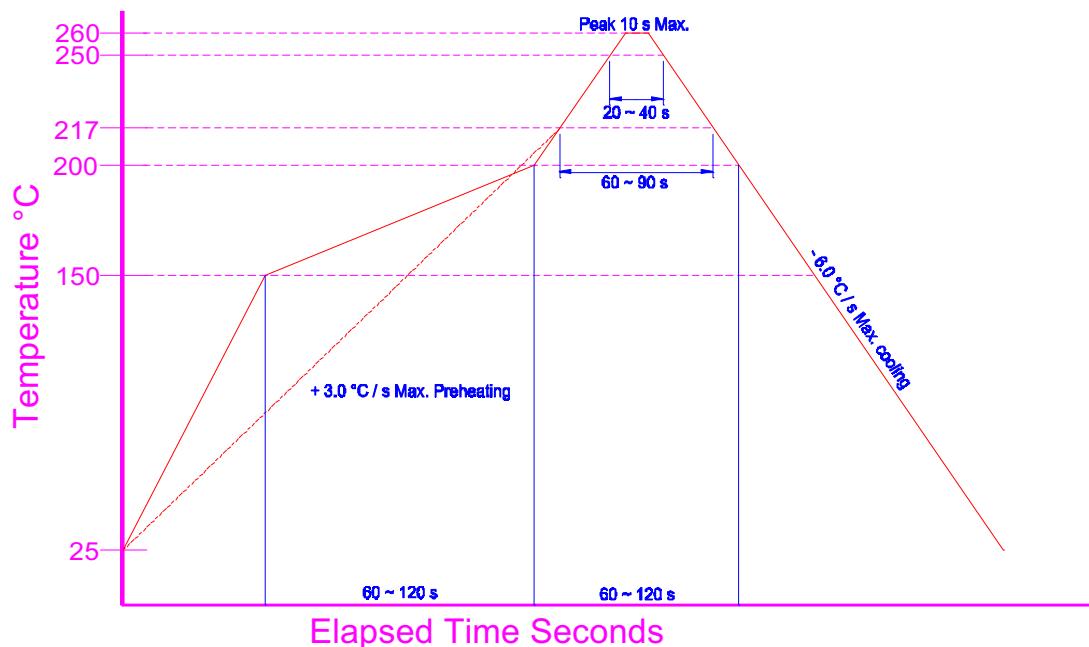
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Solder Pattern ( Reference purposes only )



Reflow Solder Profile

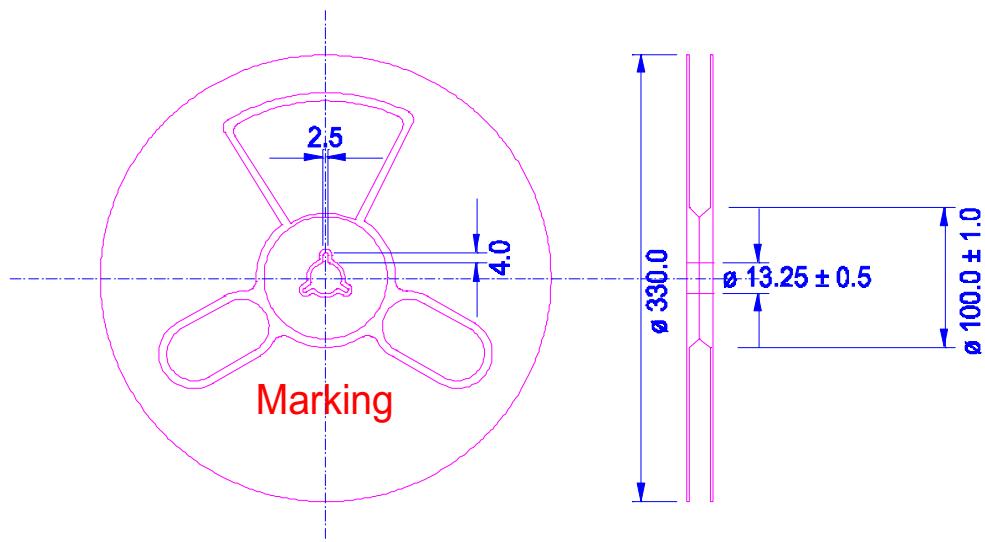
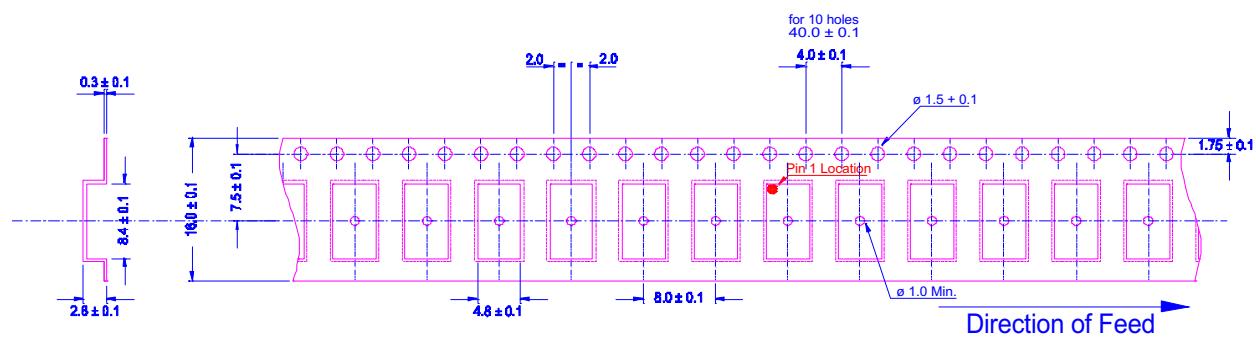




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### Tape & Reel Dimensions



### Empty Pockets

Trailing end ( Minimum ) : 200 mm.  
Leading end ( Minimum ) : 400 mm.