



## GENERAL OSCILLATOR SPECIFICATION - OC7



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**Frequency Range** : 1.000 000 to 125.000 000 MHz.

**Frequency Stability**

All Causes ( Maximum ) :  $\pm 25.0 \text{ ppm}$ ,  $\pm 50.0 \text{ ppm}$ ,  $\pm 100.0 \text{ ppm}$ . \*<sup>1</sup>

Ageing ( Maximum for first year @  $25 \pm 3^\circ\text{C}$  ) :  $\pm 5.0 \text{ ppm}$ . \*<sup>2</sup>

**Temperature Range**

Operating : 0 to  $+70^\circ\text{C}$  ( -40 to  $+85^\circ\text{C}$  option ).  
Storage : -55 to  $+125^\circ\text{C}$ .

**Supply Voltage (  $\pm 10.0\%$  )**

: + 5.0 V.		: + 3.3 V.		: + 2.5 V.		: + 1.8 V.
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**Supply Current ( Maximum )**

1.000 000 to 23.999 999 MHz	: 20.0 mA.	: 15.0 mA.	: 12.0 mA.	: 10.0 mA.
24.000 000 to 49.999 999 MHz	: 30.0 mA.	: 20.0 mA.	: 15.0 mA.	: 12.0 mA.
50.000 000 to 69.999 999 MHz	: 40.0 mA.	: 30.0 mA.	: 20.0 mA.	: 15.0 mA.
70.000 000 to 125.000 000 MHz	: 60.0 mA.	: 45.0 mA.	: 30.0 mA.	: 25.0 mA.

**Output Characteristics**

Waveform : Squarewave.

Output : HCMOS / TTL compatible.

Load ( Maximum ) : 30 pF ( 15 pF Typical ) or 10 TTL gates.

Mark Space Ratio ( @  $1/2 V_{cc}$  ) : 40:60 ( 45:55 option ).

Rise / Fall Times ( Maximum )

Rise Time ( 10 % to 90 %  $V_{cc}$  ) : 5.0 nS.

Fall Time ( 90 % to 10 %  $V_{cc}$  ) : 5.0 nS.

Start up Time ( Maximum )

: 10.0 mS.

Logic Levels

High ( Minimum ) : 0.9  $V_{cc}$ .

Low ( Maximum ) : 0.1  $V_{cc}$ .

Pin 1 ( Tri-State ) ( option )

: Enable.

High or Open

: Disable.

Low

**Package Style** : 7.00 x 5.00 x 1.50 mm.

**Marking**

- Line 1 : PDI
- Line 2 : Frequency
- Line 3 : Spec. code

Revision 001 Created on 30/01/2007 by MS

Revision 002 Updated on 01/02/2008 by MS Added pages 2,3.

Pin Connections

- 1 Tri-State or Not Connected
- 2 Ground
- 3 Output
- 4 Supply Voltage

### PRECISION DEVICES

USA

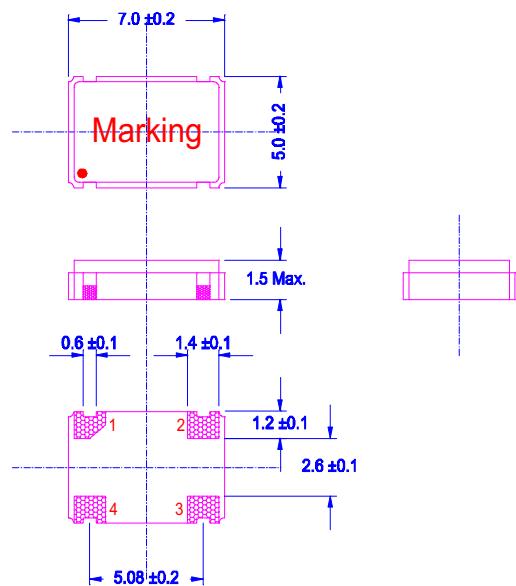
TEL: +1 608 831 4445

E-MAIL: info@pdixtal.com  
ISO 9001, Reg. No. FM 75597

UK

TEL: +44 (0)1223 834 444  
E-MAIL: sales@pdixtal.co.uk  
ISO 9001, Reg. No. FM 01995

All Dimensions and Tolerances are in mm





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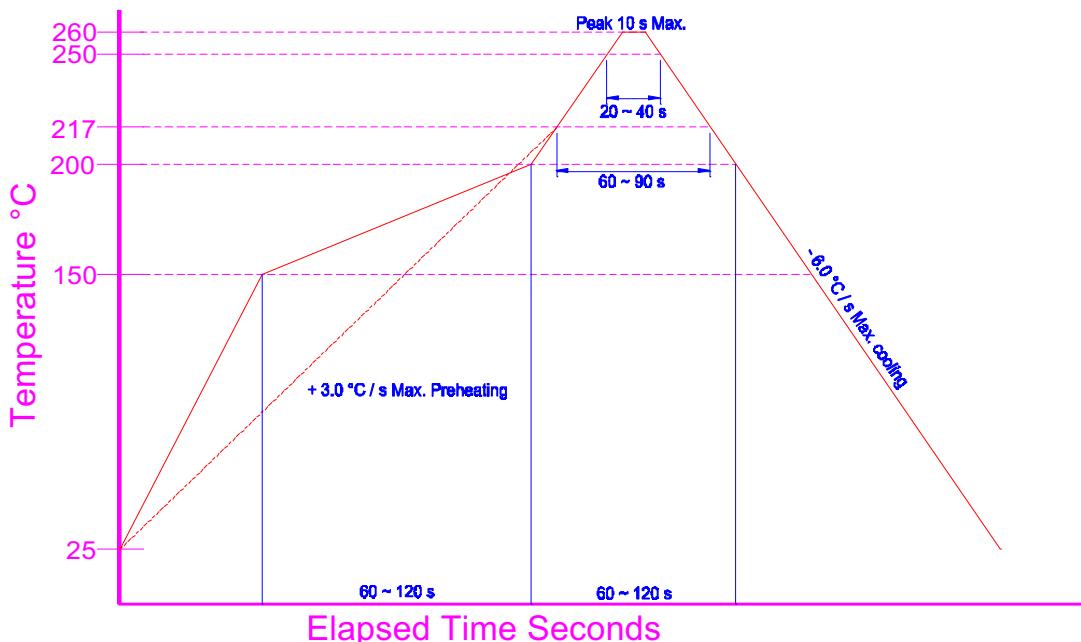
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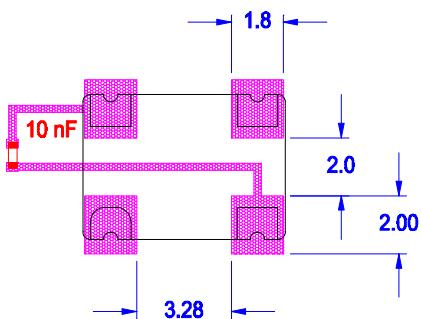
### Notes

- \*1 Inclusive of calibration @ + 25.0 °C, operating temperature range, input voltage variation, load variation, ageing, shock, and vibration.
- \*2 Even though ageing is specified in 'All Causes', see \*1, this is a refinement to the 'All Causes' parameter.  
Terminals to be Au.  
All product supplied in anti-static packaging.  
All product is supplied RoHS compliant.  
Product can be supplied on Tape and Reel, on reels of 1,000 units.

Reflow Solder Profile



Recommended Solder Pattern



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It is recommended that a 10 nF bypass capacitor should be placed between the Supply and Ground Pins to minimise power supply line noise.

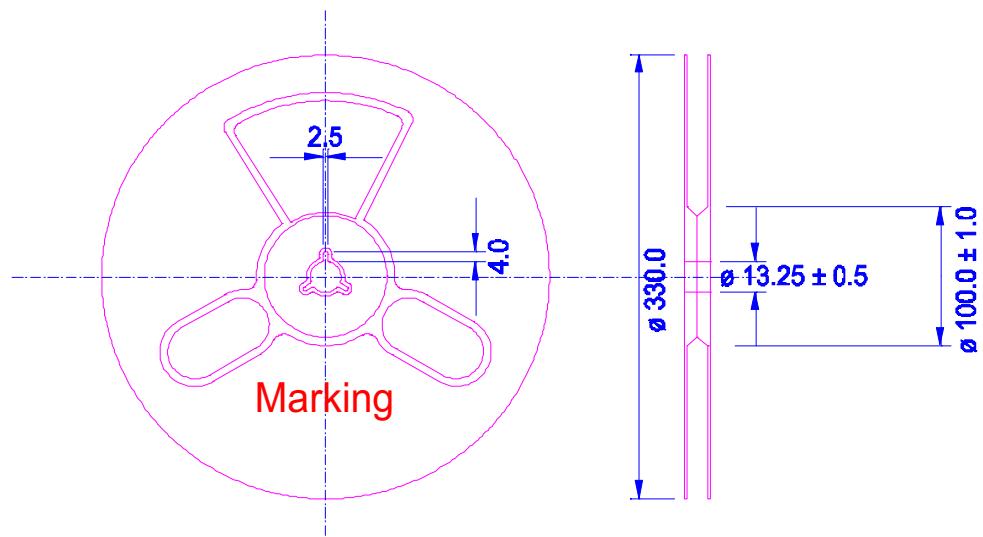
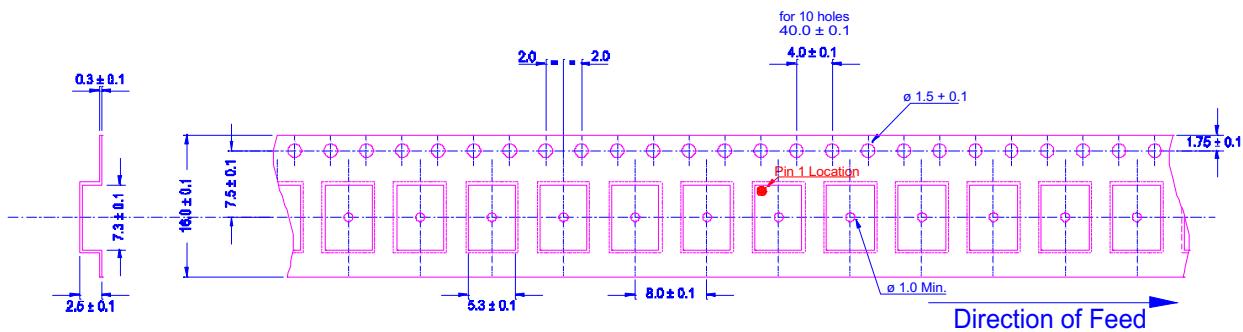


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### Tape & Reel Dimensions



#### Empty Pockets

- Trailing end : 200 mm Minimum.
- Leading end : 400 mm Minimum.

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