



# GENERAL OSCILLATOR SPECIFICATION - OC5



|   |  |            |            |            |
|---|--|------------|------------|------------|
| <b>Frequency Range</b>                        | : 1.544 000 to 125.000 000 MHz.            |            |            |            |
| <b>Frequency Stability</b>                    | : ± 25.0 ppm, ± 50.0 ppm, ± 100.0 ppm. *1  |            |            |            |
| All Causes ( Maximum )                        | : ± 25.0 ppm, ± 50.0 ppm, ± 100.0 ppm. *1  |            |            |            |
| Ageing ( Maximum for first year @ 25 ± 3 °C ) | : ± 5.0 ppm. *2                            |            |            |            |
| <b>Temperature Range</b>                      | : 0 to + 70 °C ( - 40 to + 85 °C option ). |            |            |            |
| Operating                                     | : 0 to + 70 °C ( - 40 to + 85 °C option ). |            |            |            |
| Storage                                       | : - 55 to + 125 °C.                        |            |            |            |
| <b>Supply Voltage</b> ( ± 10.0 % )            | : + 5.0 V.                                 | : + 3.3 V. | : + 2.5 V. | : + 1.8 V. |
| <b>Supply Current</b> ( Maximum )             |  |            |            |            |
| 1.544 000 to 9.999 999 MHz                    | : 15.0 mA.                                 | : 8.0 mA.  | : 7.0 mA.  | : 6.0 mA.  |
| 10.000 000 to 34.999 999 MHz                  | : 20.0 mA.                                 | : 10.0 mA. | : 8.0 mA.  | : 7.0 mA.  |
| 35.000 000 to 49.999 999 MHz                  | : 35.0 mA.                                 | : 25.0 mA. | : 20.0 mA. | : 15.0 mA. |
| 50.000 000 to 125.000 000 MHz                 | : 40.0 mA.                                 | : 35.0 mA. | : 30.0 mA. | : 25.0 mA. |
| <b>Output Characteristics</b>                 |  |            |            |            |
| Waveform                                      | : Squarewave.                              |            |            |            |
| Output  | : HCMOS / TTL compatible.                  |            |            |            |
| Load ( Maximum )                              | : 30 pF ( 15 pF Typical ).                 |            |            |            |
| Mark Space Ratio ( @ 1/2 V <sub>CC</sub> )    | : 40:60 ( 45:55 option ).                  |            |            |            |
| Rise / Fall Times ( Maximum )                 |  |            |            |            |
| Rise Time ( 10 % to 90 % V <sub>CC</sub> )    | : 5.0 nS.                                  | : 7.0 nS.  | : 6.0 nS.  | : 5.0 nS.  |
| Fall Time ( 90 % to 10 % V <sub>CC</sub> )    | : 5.0 nS.                                  | : 7.0 nS.  | : 6.0 nS.  | : 5.0 nS.  |
| Start up Time ( Maximum )                     | : 10.0 mS.                                 |            |            |            |
| Logic Levels                                  |  |            |            |            |
| High ( Minimum )                              | : 0.9 V <sub>CC</sub> .                    |            |            |            |
| Low ( Maximum )                               | : 0.1 V <sub>CC</sub> .                    |            |            |            |
| Pin 1 ( Tri-State ) ( option )                |  |            |            |            |
| High or Open                                  | : Enable.                                  |            |            |            |
| Low   | : Disable.                                 |            |            |            |
| <b>Package Style</b>                          | : 5.00 x 3.20 x 1.30 mm.                   |            |            |            |
| <b>Marking</b>                                |  |            |            |            |
| Line 1  | : <b>PDI</b>                               |            |            |            |
| Line 2  | : 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

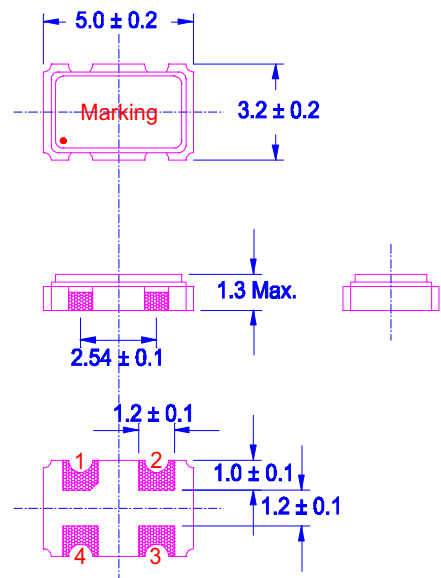
USA

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ISO 9001, Reg. No. FM 01995



All Dimensions and Tolerances are in mm



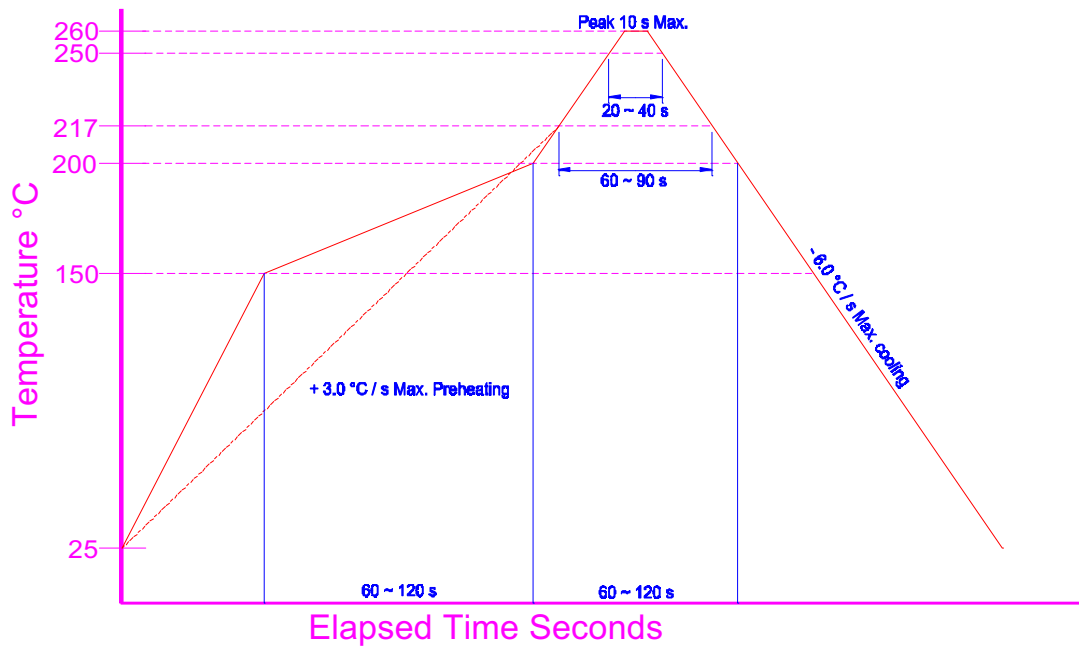
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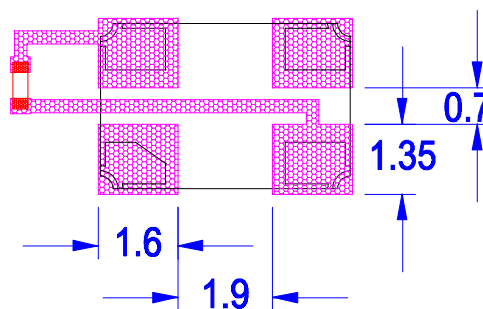
**Notes**

- \*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



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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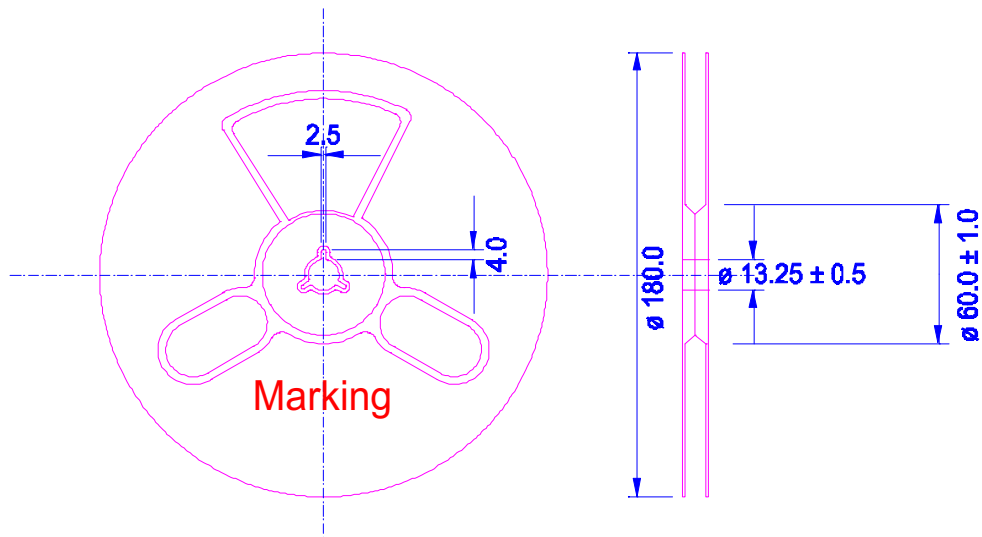
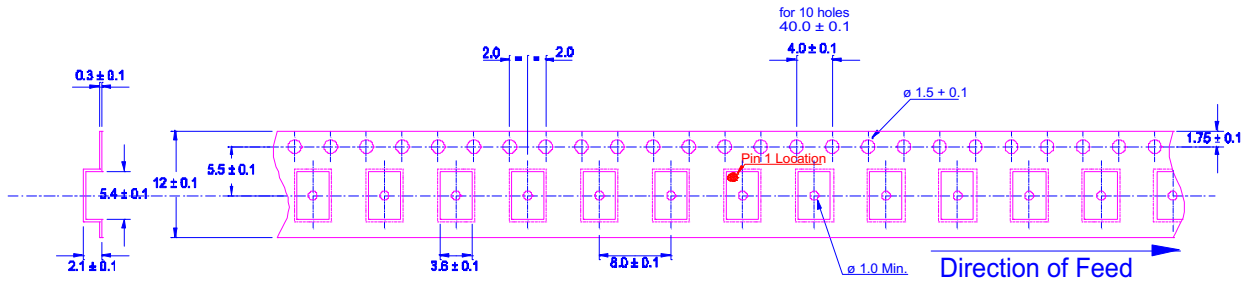


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## Tape & Reel Dimensions



### Empty Pockets

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

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