



GENERAL OSCILLATOR SPECIFICATION - TC05



Frequency Range	: 12.000 000 to 26.000 000 MHz.
Frequency Stability	
All causes (Maximum)	: ± 2.5 ppm. *1
@ + 25.0 °C (Maximum)	: ± 0.5 ppm. *2
Ageing (Maximum for first year @ 25.0 °C)	: ± 1.0 ppm. *2
Frequency Adjustment	(over voltage control range applied to Pin 1)
Frequency Range (Electrical) (Minimum)	: ± 9.0 ppm to ± 15.0 ppm.
Voltage Control Range	: + 0.5 to + 3.0 V.
Slope	: Positive, increasing control voltage increases output frequency.
Linearity	: 10.0 % Maximum.
Temperature Range	
Operating	: - 30 to + 85 °C (- 40 to + 85 °C option).
Storage	: - 40 to + 85 °C.
Supply Voltage (± 5.0 %)	: + 3.0 V.
Supply Current (Maximum)	: 2.0 mA.
Output Characteristics	
Waveform	: Clipped Sinewave.
Output (Minimum)	: 0.8 V peak to peak.
Load(± 10.0 %)	: (10 kΩ // 10pF).
Start up Time (Maximum)	: 10.0 mS.
SSB Phase Noise (Typical)	
10.0 Hz	: -70 dBc/Hz.
100.0 Hz	: -100 dBc/Hz.
1.0 kHz	: -130 dBc/Hz.
10.0 kHz	: -140 dBc/Hz.
100.0 kHz	: -140 dBc/Hz.
Package Style	: 5.00 x 3.20 x 1.50 mm.
Marking	
Line 1	: PDI
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.

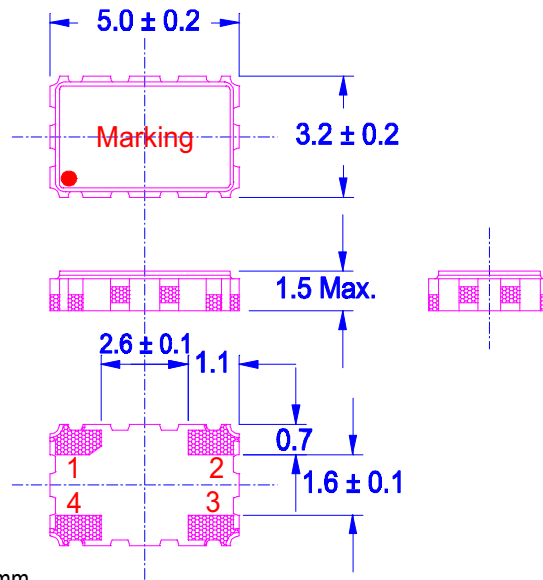
Pin Connections

- 1 Voltage Control
- 2 Ground
- 3 Output
- 4 Supply Voltage

**PRECISION
DEVICES
(UK) LIMITED**

TEL: +44 (0)1223 834 444
FAX: +44 (0)1223 834 589
E-MAIL: sales@pdixtal.co.uk

ISO
ISO9001
Reg. No. FM 01995



All Dimensions and Tolerances are in mm



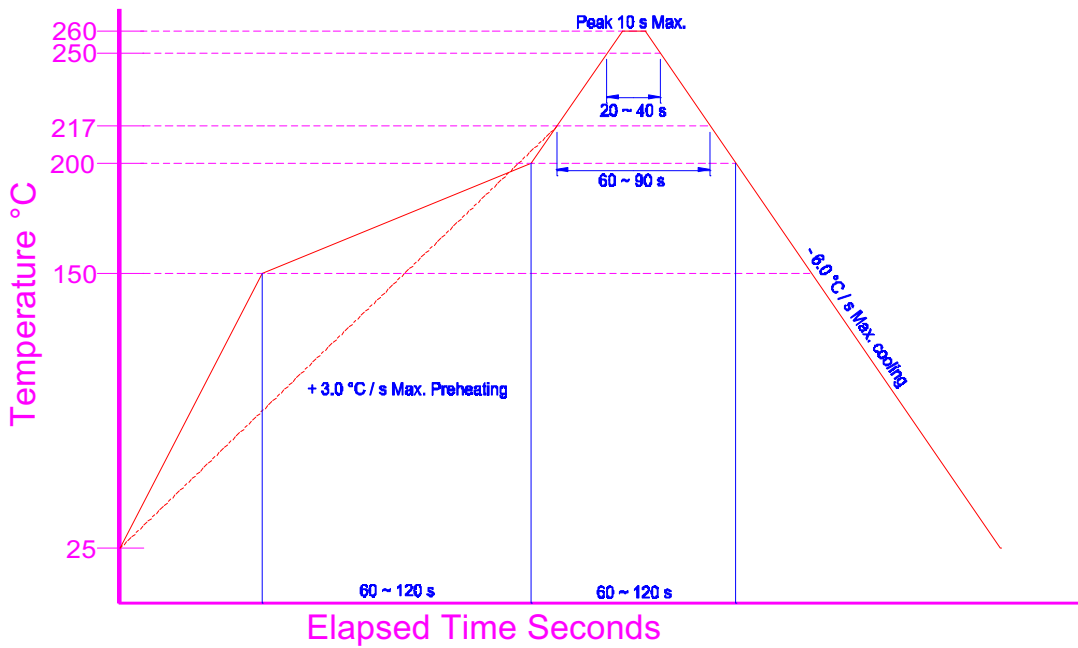
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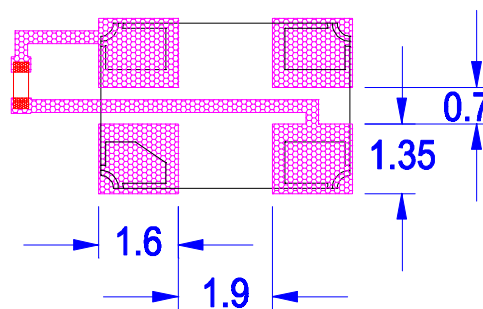
Notes

- *1 Inclusive of calibration @ + 25.0 °C, operating temperature range, input voltage variation, load variation, ageing, shock, and vibration.
 - *2 Even though these are 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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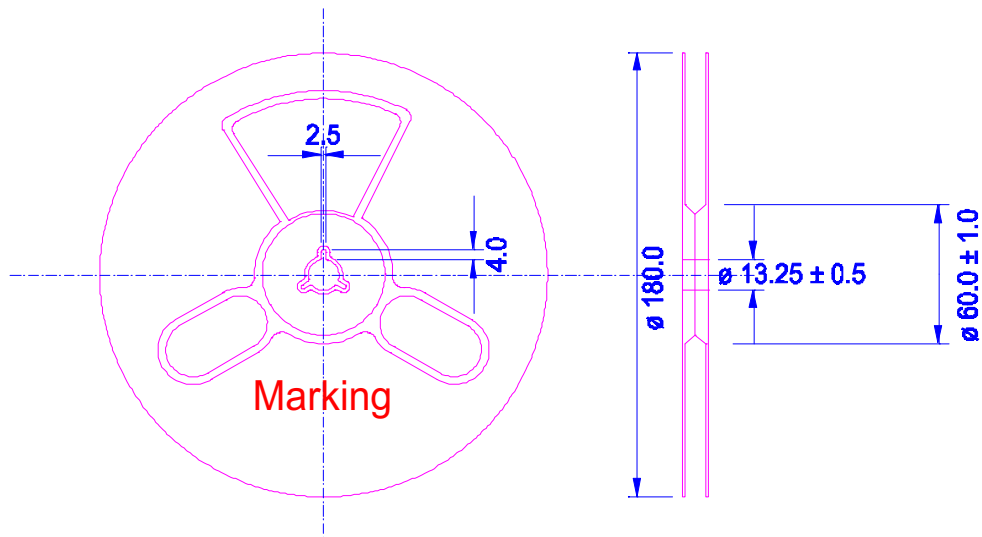
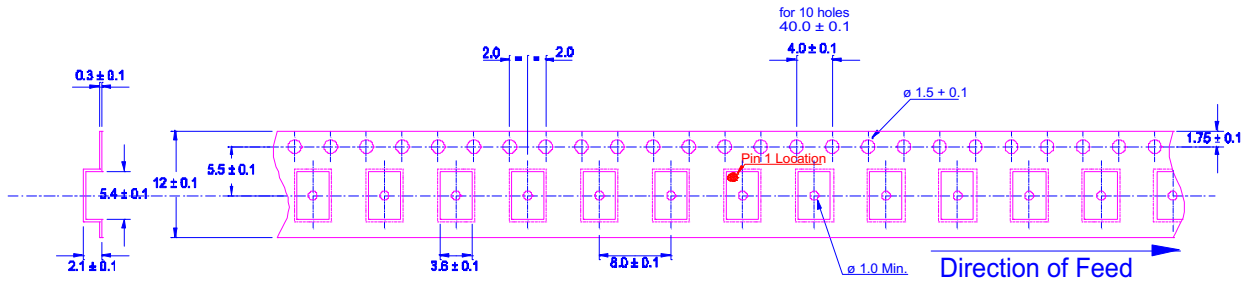


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Tape & Reel Dimensions



Empty Pockets

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

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