



# GENERAL OCXO SPECIFICATION : OCXO-200



<b>Frequencies Available</b>	: 5.000 000 to 40.000 000 MHz.	
<b>Xtal Cut</b>	: AT-Cut	SC-Cut ( option )
<b>Frequency Stability</b>		
vs Temperature ( Maximum ) <sup>*1</sup>		
- 20.0 to + 70.0 °C	: ± 80.0 ppb.	± 15.0 ppb.
- 40.0 to + 85.0 °C	: ± 200.0 ppb.	± 30.0 ppb.
vs Supply Voltage ( Maximum for a 5.0 % change )	: ± 5.0 ppb.	± 5.0 ppb.
vs Load ( Maximum for a 5.0 % change )	: ± 5.0 ppb.	± 5.0 ppb.
vs Ageing		
Per day ( after 72 hours operation ) ( Maximum )	: ± 2.0 ppb.	± 1.0 ppb.
Per year ( after 72 hours operation ) ( Maximum )	: ± 500.0 ppb.	± 100.0 ppb.
Per year after first ( Maximum )	: ± 250.0 ppb.	± 50.0 ppb.
Calibration ( @ + 25.0 °C )		
Initial ( at shipment ) ( Maximum )	: ± 300.0 ppb.	± 100.0 ppb.
3 Minutes after switch on ( Maximum )	: ± 100.0 ppb.	± 10.0 ppb.
<b>Frequency Adjustment</b> ( over voltage control range applied to Pin 3 ) <sup>*2</sup>		
Frequency Range ( Electrical )	: ± 6.0 to ± 12.0 ppm.	± 0.75 to ± 2.0 ppm.
Voltage Control Range		
With supply voltage @ 3.3 V.	: + 0.0 to + 3.0 V.	
With supply voltage @ 5.0 V.	: + 0.0 to + 4.0 V.	
With supply voltage @ 12.0 V.	: + 0.0 to + 5.0 V.	
Reference Voltage Output ( ± 2.0 % )		
With supply voltage @ 3.3 V.	: + 2.8 V.	
With supply voltage @ 5.0 V.	: + 4.0 V.	
With supply voltage @ 12.0 V.	: + 5.0 V.	
Slope	: Positive, increasing control voltage increases output frequency.	
Linearity	: 20.0 % Maximum.	
<b>Temperature Range</b>		
Operating	: - 40 to + 85 °C ( other options available ).	
Storage	: - 55 to + 125 °C.	
<b>Supply Voltage</b> ( ± 5.0 % )	: + 5.0 V ( 3.30 V & 12.0 V options ).	
<b>Power Consumption</b> ( @ + 25.0 °C ) ( Maximum )		
During warm up ( first 3 minutes after switch on )	: 3.5 W.	
Steady State	: 1.2 W.	

## PRECISION DEVICES

USA

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ISO 9001, Reg. No. FM 75597

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Revision 001 Created on 23/09/2009 by MS



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AT-Cut | SC-Cut

**Output Characteristics**

Waveform : Squarewave.  
 Output : HCMOS.  
 Load : 15 pF.  
 Mark Space Ratio ( @ 1/2 Vcc ) : 45:55.  
 Logic Levels ( @ 15 pF Load )  
   High ( Minimum )  
     With supply voltage @ 3.3 V. : 3.0 V.  
     With supply voltage @ 5.0 V. : 4.5 V.  
     With supply voltage @ 12.0 V. : 4.5 V.  
   Low ( Maximum )  
     With supply voltage @ 3.3 V. : 0.3 V.  
     With supply voltage @ 5.0 V. : 0.5 V.  
     With supply voltage @ 12.0 V. : 0.5 V.

( Option )

Waveform : Sinewave.  
 Load : 50 Ω.  
 Output Power ( @ 50 Ω Load )  
   Minimum : + 3.0 dBm.  
   Typical : + 5.5 dBm.  
   Maximum : + 8.0 dBm.  
 Harmonics ( @ 50 Ω Load ) ( Maximum ) : - 30.0 dBc.

**Package Style** : 38.10 x 27.94 x 19.00 mm.

**Marking**

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

**Phase Noise ( @ 10.0 MHz ) ( Maximum )**

@ 1.0 Hz	: - 75 dBc / Hz.	: - 85 dBc / Hz.
@ 10.0 Hz	: - 100 dBc / Hz.	: - 120 dBc / Hz.
@ 100.0 Hz	: - 130 dBc / Hz.	: - 140 dBc / Hz.
@ 1.0 kHz	: - 140 dBc / Hz.	: - 145 dBc / Hz.
@ 10.0 kHz	: - 150 dBc / Hz.	: - 150 dBc / Hz.

**Notes**

\*1 Other Temperature and Stability combinations available.  
 \*2 Fixed option available, no adjust.  
 Terminals to be SnAgCu.  
 All product supplied in anti-static packaging.  
 All product is supplied RoHS compliant.

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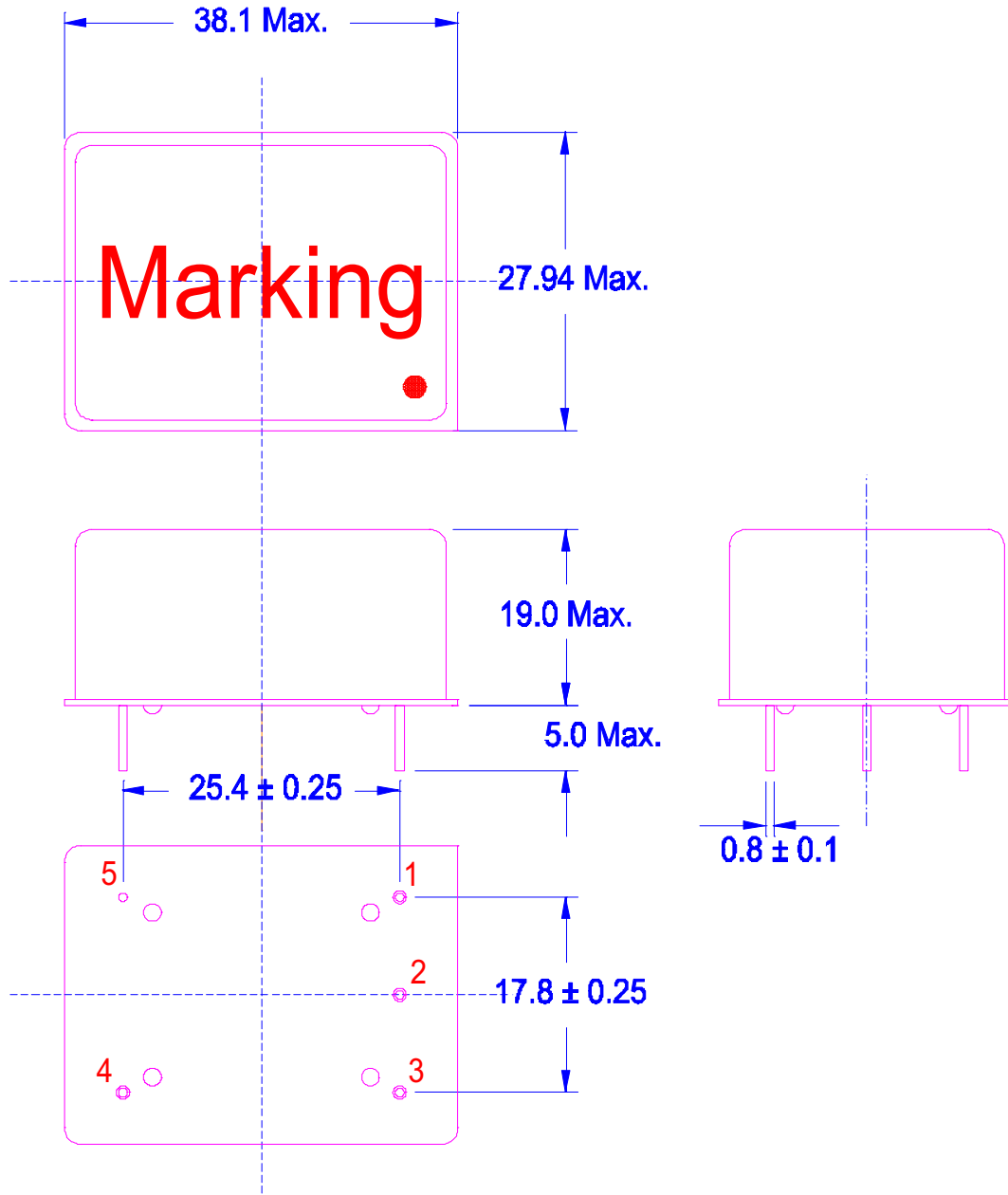
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**GENERAL OCXO  
SPECIFICATION : OCXO-200**



Package Drawing



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Pin Connections

- 1 Voltage Control
- 2 Reference Voltage Output
- 3 Supply Voltage
- 4 Output
- 5 Ground / Case

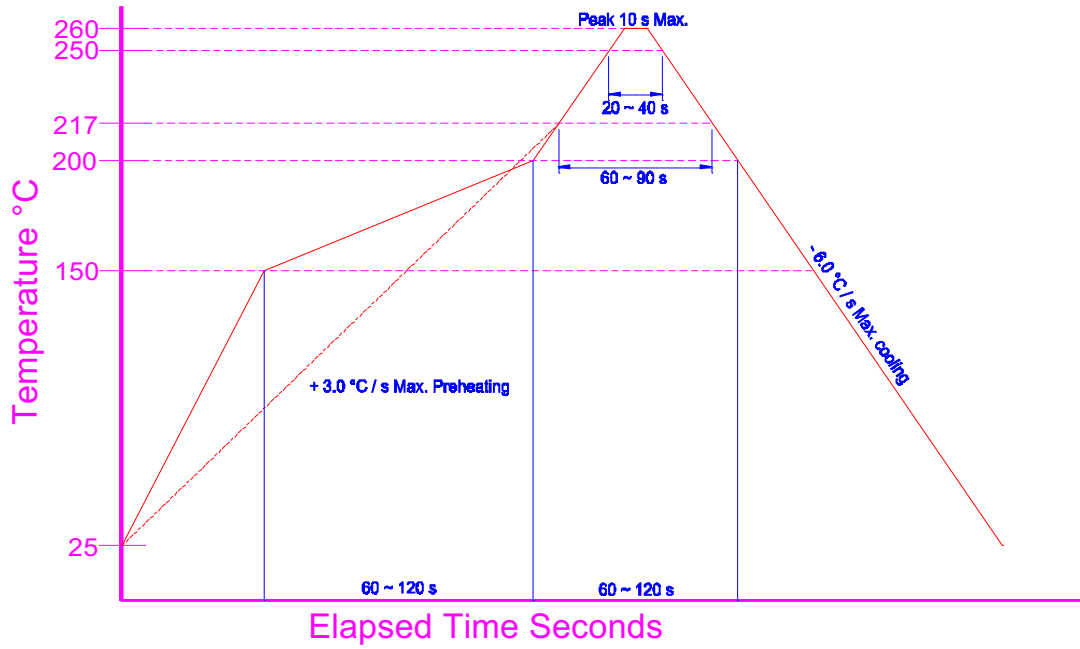
All Dimensions and Tolerances are in mm



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## Reflow Solder Profile



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