



## GENERAL OSCILLATOR SPECIFICATION : OC7

Parameter	Supply Voltage <sup>*1</sup> ( ± 10 % )						Units	
	5.0	3.3	3.0	2.8	2.5	1.8	V	
Frequency Range <sup>*1</sup>	1.000 000 to 166.000 000						MHz	
Frequency Stability <sup>*1</sup>	All Causes ( Maximum ) <sup>*2</sup>						ppm	
	Aging ( Maximum per year at + 25 °C ) <sup>*3</sup>						ppm	
Temperature Range <sup>*1</sup>	Operating						°C	
	Storage						°C	
Supply Current ( Maximum )	1.000 000 to 23.999 999 MHz	20	15	15	12	15	10	mA
	24.000 000 to 49.999 999 MHz	30	20	20	15	20	12	mA
	50.000 000 to 69.999 999 MHz	40	30	30	20	30	15	mA
	70.000 000 to 166.000 000 MHz	60	45	45	30	45	25	mA
Waveform	Squarewave							
Output	HCMOS / TTL compatible							
Load ( Maximum )	15 pF / 5 TTL gates							
Mark Space Ratio ( at 50 % V <sub>CC</sub> )	40 : 60 % ( 45 : 55 % option )							
Rise / Fall Times ( Maximum )	Rise Time ( 10 % to 90 % V <sub>CC</sub> )						ns	
	Fall Time ( 90 % to 10 % V <sub>CC</sub> )						ns	
Start up Time ( Maximum )	10						ms	
Logic Levels	High ( Minimum )						V <sub>CC</sub>	
	Low ( Maximum )						V <sub>CC</sub>	
Pin 1 ( Tri-State ) ( option )	High ( see below ) or Open						Enable	
	Low ( see below ) <sup>*4</sup>						Disable	
	High value ( Minimum )	44	70	70	70	70	70	% V <sub>CC</sub>
	Low value ( Maximum ) <sup>*4</sup>	16	20	20	20	20	20	% V <sub>CC</sub>
	Disable Current ( Maximum ) <sup>*4</sup>	50	10	10	10	10	10	µA
	Enable Delay Time ( Maximum )	10						ms
Disable Delay Time ( Maximum )	100	150	150	150	150	150	ns	

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

**Marking**

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

**Notes**

- \*1 Not all Frequency / Temperature / Voltage combinations are available.
- \*2 Inclusive of calibration at + 25 °C, operating temperature range, input voltage variation, load variation, aging, shock, and vibration.
- \*3 Even though aging is specified in 'All Causes', see <sup>\*2</sup> this is a refinement to the 'All Causes' parameter.
- \*4 Internal crystal oscillation halted.

Terminals to be Au.

All product supplied in anti-static packaging.

All product is supplied RoHS and REACH compliant.

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

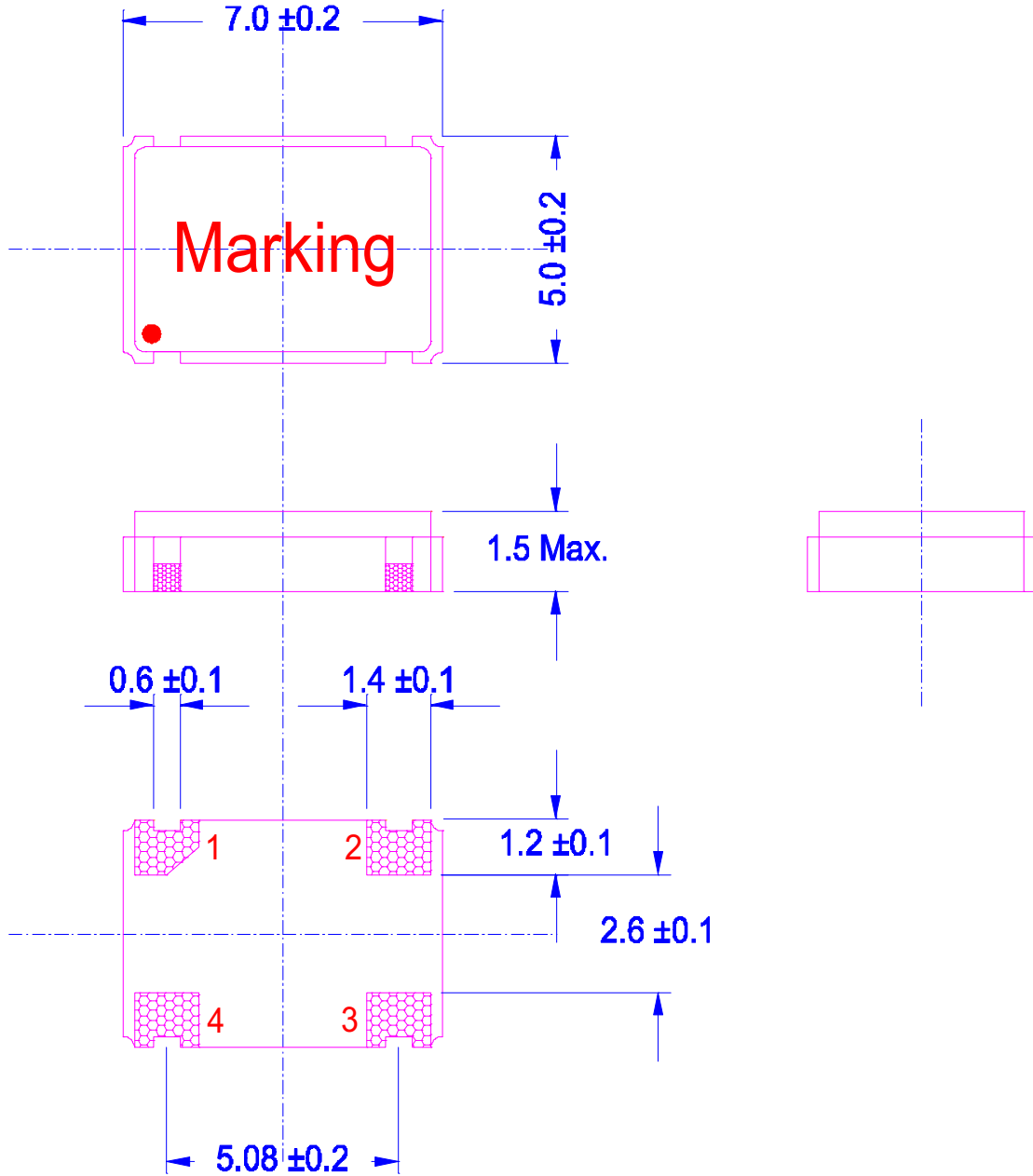
Specifications subject to change without notice, last updated 23<sup>rd</sup> May 2011.



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Package Drawing



Pin Connections

All Dimensions and Tolerances are in mm

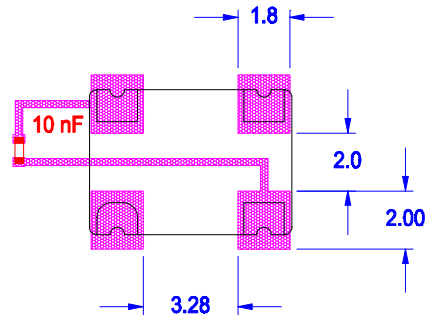
- 1 Tri-State or Not Connected
- 2 Ground / Case
- 3 Output
- 4 Supply Voltage



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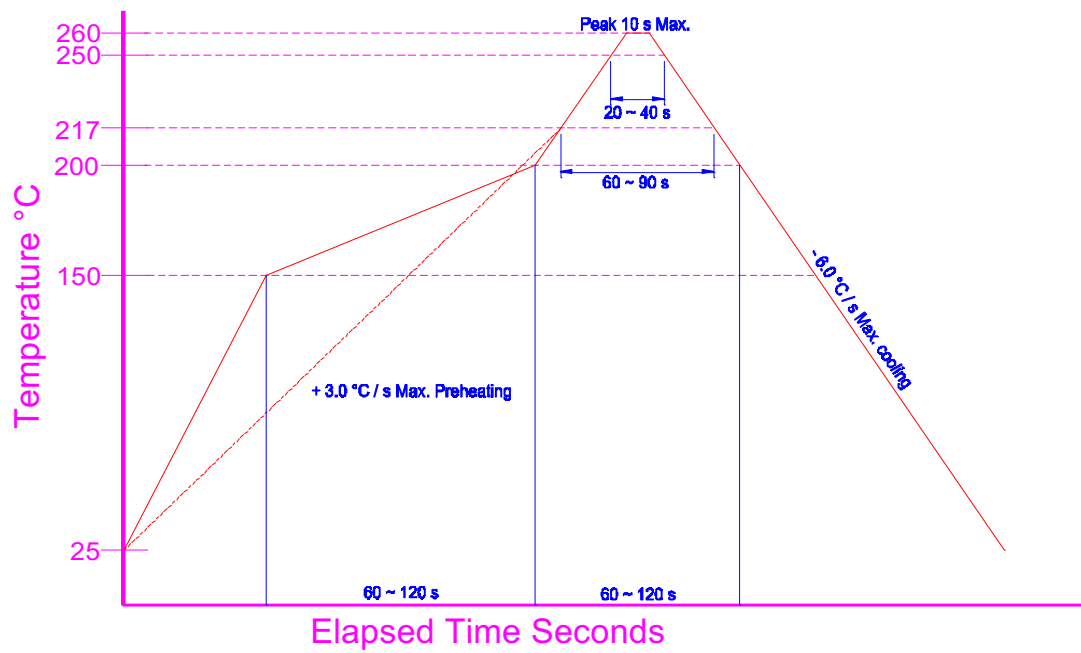


## Solder Pattern ( Reference purposes only )



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

## Reflow Solder Profile

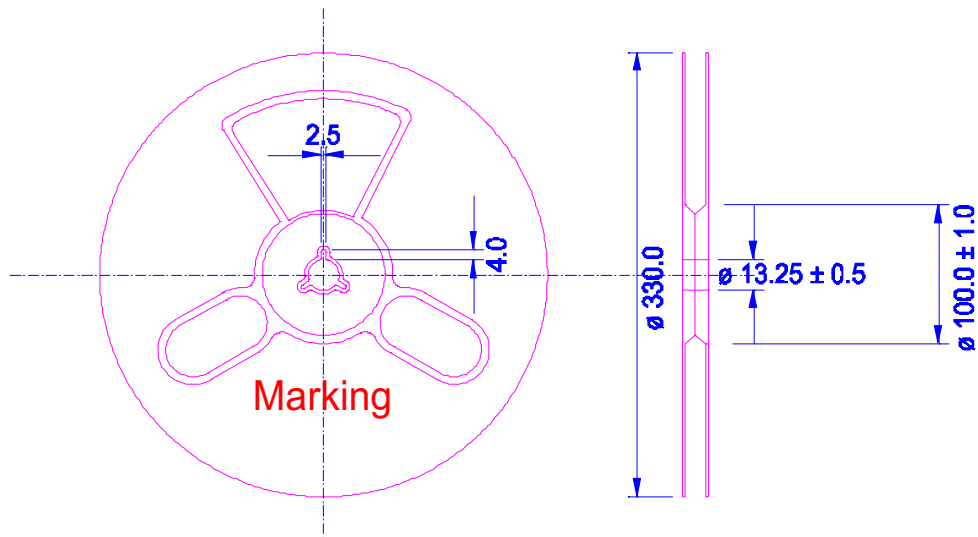
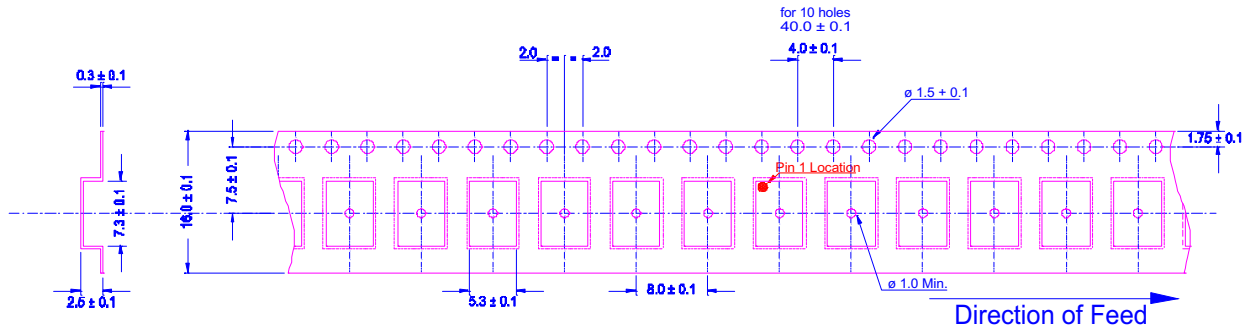




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## Tape & Reel Dimensions



There may be small variations in pocket size and material thickness from reel to reel.

### Empty Pockets

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