

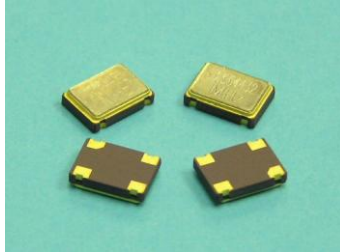
# Product Specification



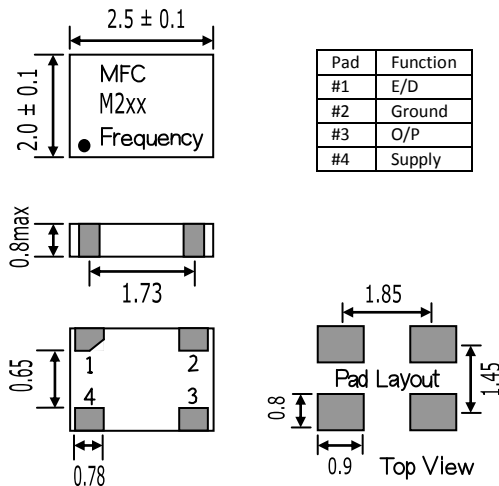
This product is certified to comply with the RoHS Directive 2002/95/EC.



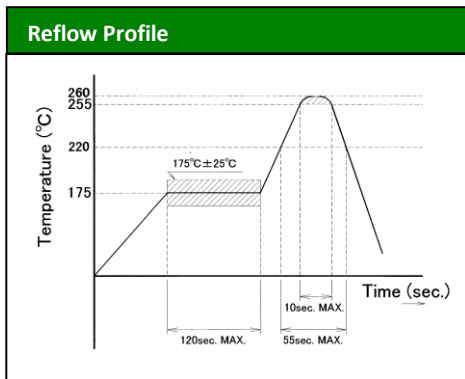
## M233 Series SMD Clock Oscillator



- 2.5x2.0x0.8mm
- Ceramic package
- 3.3V supply
- Small size
- Tri-state
- Wide frequency range
- -40 ~ +85°C available



Specification	
Frequency range	0.75 ~ 50MHz
Stability (Note 1)	±25 ~ ±100ppm
Temp. range	-20 ~ +70°C -40 ~ +85°C
Supply voltage	3.3V±5%
Supply current	0.75 ~ 19.999MHz: 6mA max. 20.0 ~ 39.999MHz: 7mA max. 40.0MHz+: 8mA max.
Output	HCMOS 15pF
Duty cycle	50%±5%@V <sub>DD</sub> /2
Rise/fall time	10nS max.
Enable/Disable	
Pin 1 High (Logic 1)	Output enabled
Pin 1 Open circuit	Output enabled
Pin 1 Low (Logic 0)	Output high impedance



Note 1: Stability is inclusive of adjustment at 25°C, temperature variation, supply and load variation and ageing.

\* suffix denotes RoHS Compliant

Standard packing: 1Kpcs per 7" taped reel

Ordering Code Guide							
Series Code	Case	Voltage	Stability	Output	Temp. range	Frequency	RoHS
M	2=2.5x2.0mm	33=3.3V	A=±25ppm B=±50ppm C=±100ppm	H=HCMOS 15pF	C=-20 ~ +70°C I=-40 ~ +85°C	xxMxxx	*

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