

# CM9V-T1A

## Ultra-Miniature 1610 Package 32.768kHz SM Watch Crystal



- Ultra low profile - 0.5mm
- Miniature ceramic package with metal lid
- High shock & vibration resistance
- Low power consumption

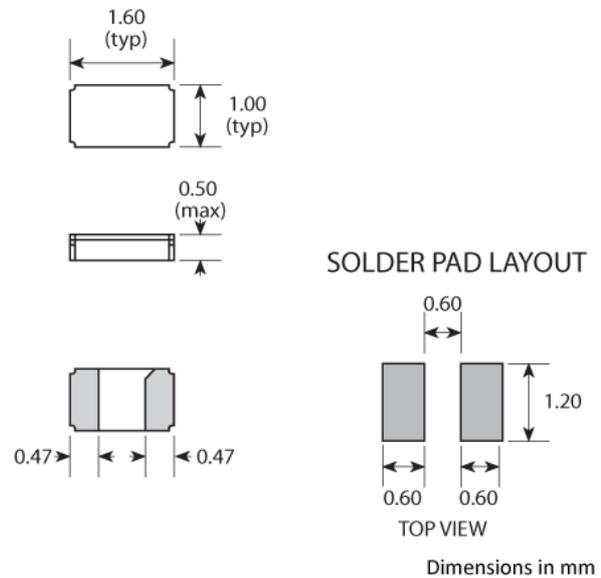
### CONFIGURABLE OPTIONS

Parameter	Option Code
<b>Calibration tolerance</b>	
±20ppm	
±100ppm	
<b>Operating temperature range</b>	
Any	
-40 to +85°C	
-40 to +125°C	E
-55 to +125°C	M
<b>Circuit condition</b>	
Any	
4pF	
6pF	
7pF	
9pF	
12.5pF	

## SPECIFICATIONS

Frequency	32.768kHz
Dimensions	1.6 x 1.0 x 0.5mm
Storage temperature range	-55 to +125°C
Static capacitance (C <sub>0</sub> )	1.0pF typ
Motional capacitance (C <sub>1</sub> )	3.6fF typ
Equivalent series resistance	90kΩ max @ 25°C
Ageing	±3ppm max first year
Drive level	0.5μW max
Turnover temperature (T <sub>0</sub> )	+25°C ±5°C
Frequency / temp coefficient	-0.035ppm/°C <sup>2</sup> ±10%
Shock resistance	±5ppm, 5,000g, 0.3ms, ½ sine
Vibration resistance	±5ppm, 20g, 10.0 ~ 2,000Hz
Terminations	Gold plated pads
Soldering condition	Reflow, 260°C, 20 sec max

## PACKAGE DRAWING



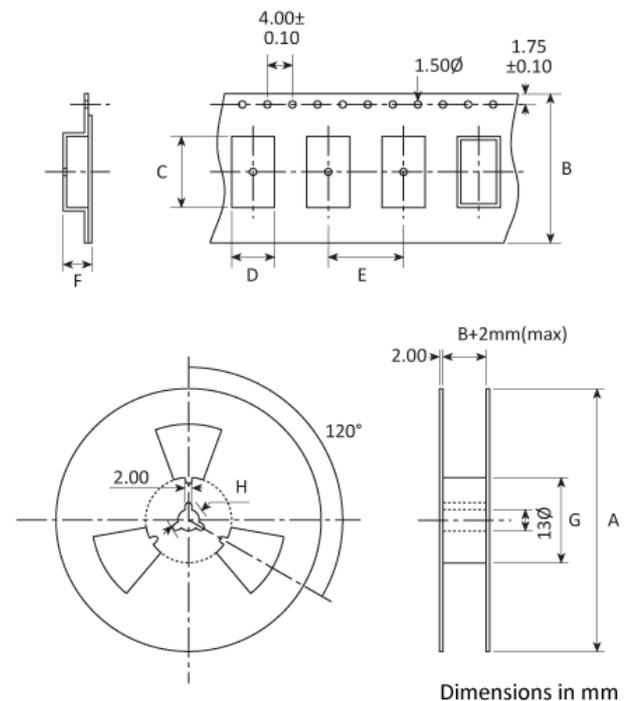
## ORDERING INFORMATION

To request a quotation for the CM9V-T1A please use the configurable options form to choose the options you require and then submit your configured product to our team. Our expert advisers are always happy to help with your requirements and can be contacted on +44 1460 256 100 or at [sales@golledge.com](mailto:sales@golledge.com).

Following product selection you will be issued with a seven character Golledge part number. Your Golledge part number is the internationally accepted Golledge manufacturing part number (MPN) that should be used for all project documentation, including bills of materials (BoMs) and purchase orders.

If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

## TAPE & REEL SPECIFICATION



A:178 B:8 C:1.8 D:1.2 E:4 F:0.5 G:61.5 H:21

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## HANDLING & STORAGE

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Human Body Model (HBM) 1A (250V to <500V)



Moisture Sensitivity Level (MSL): 1 (or not applicable)

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## CONSTRUCTION

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Ceramic base with metal lid

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## COMPLIANCE

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Please refer to our **DOCUMENTS** section for more information.



Lead-free (< 0.1% by weight )



RoHS compliant with no exemptions.



REACH compliant.



Free of conflict minerals.



Free from halogens.



Free from ozone-depleting substances.