

# 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

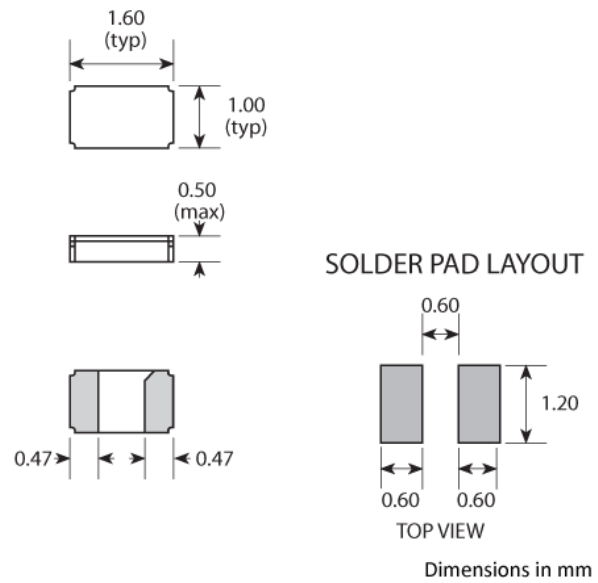
### CONFIGURABLE OPTIONS

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.

## HANDLING & STORAGE



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





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


## CONSTRUCTION

Ceramic base with metal lid


## MATERIAL COMPOSITION


 Lead-free (< 0.1% by weight)

 RoHS 2 compliant with no exemptions. [See our declaration](#)

 REACH compliant. [See our statement](#)

 Free of conflict minerals. [See our declaration](#)

 Free of Halogens. [See our declaration](#)

 Free of Ozone-depleting substances. [See our declaration](#)

## OTHER INFORMATION

### About Golledge

We are the UK's leading supplier of frequency control products and are proud to serve the global electronics industry. Our philosophy is a focus firmly on your requirements by striving to meet and exceed your needs. We do this by ensuring the utmost quality and consistency in our products and services. If you have any queries about the Golledge service or any of our products please get in touch, we'd love to hear from you.

### Come and visit

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Our customer feedback is testament to our quality; "Never had such good service as this from anyone in 35 years of being in the industry, this is impressive and has really helped us out of a corner to keep the design flowing" Andy (Senior Design Engineer), "As always your support is state of the art" Nicoleta (Material Management), "Legendary work - as usual it has to be said" John (Operations).

To take advantage of our highly praised service get in touch with us today.