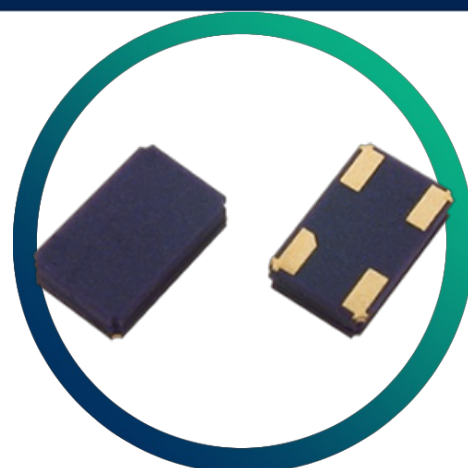


# CC6A-T1D

## High Frequency Fundamental Mode

### SM Crystal -55+125°C

- Suitable for Avionics, Sat Comms etc
- Extended temperature range -55+125°C option
- High stability & low ageing
- High shock & vibration resistance
- Fundamental mode up to 70MHz



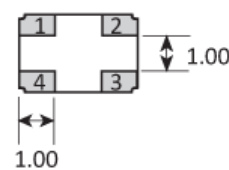
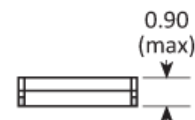
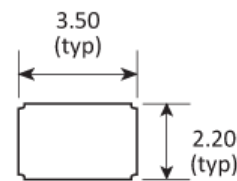
#### CONFIGURABLE OPTIONS

| Parameter                  | Option Code |
|----------------------------|-------------|
| Frequency                  |             |
| Temperature stability      |             |
| Any                        |             |
| ±50ppm over -40 to +85°C   | TA          |
| ±80ppm over -40 to +125°C  | TB          |
| ±100ppm over -55 to +125°C | TC          |
| Circuit condition          |             |
| 20pF                       |             |

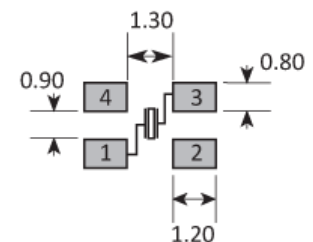
## SPECIFICATIONS

|                                        |                                                                                                                                                      |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency range                        | 16.0 ~ 70.0MHz                                                                                                                                       |
| Dimensions                             | 3.5 x 2.2 x 0.9mm                                                                                                                                    |
| Calibration tolerance (@ 25 °C)        | ±50ppm                                                                                                                                               |
| Storage temperature range              | -55 to +125 °C                                                                                                                                       |
| Oscillation mode                       | Fundamental                                                                                                                                          |
| Equivalent series resistance           | 60Ω typ, 120Ω max (16.0 ~ 19.99MHz)<br>40Ω typ, 85Ω max (20.0 ~ 23.99MHz)<br>30Ω typ, 50Ω max (24.0 ~ 39.99MHz)<br>20Ω typ, 40Ω max (40.0 ~ 70.0MHz) |
| Motional capacitance (C <sub>1</sub> ) | 2fF typ, 4fF max (16.0 ~ 19.99MHz)<br>3fF typ, 5fF max (20.0 ~ 23.99MHz)<br>4fF typ, 6fF max (24.0 ~ 39.99MHz)<br>5fF typ, 8fF max (40.0 ~ 70.0MHz)  |
| Static capacitance (C <sub>0</sub> )   | 1.5pF typ (16.0 ~ 19.99MHz)<br>2.0pF typ (20.0 ~ 23.99MHz)<br>2.5pF typ (24.0 ~ 39.99MHz)<br>3.0pF typ (40.0 ~ 70.0MHz)                              |
| Ageing                                 | ±3ppm max first year                                                                                                                                 |
| Drive level                            | 100μW typ, 250μW max                                                                                                                                 |
| Shock resistance                       | 5,000g, 0.3ms, ½ sine                                                                                                                                |
| Vibration resistance                   | 20g rms 10.0 ~ 2,000Hz                                                                                                                               |
| Terminations                           | Gold flashed pads                                                                                                                                    |
| Soldering condition                    | 260 °C, 20s max                                                                                                                                      |

## PACKAGE DRAWING



### SOLDER PAD LAYOUT



TOP VIEW

| PAD | CONNECTION    |
|-----|---------------|
| 1   | Crystal       |
| 2   | Not connected |
| 3   | Crystal       |
| 4   | Not connected |

Dimensions in mm

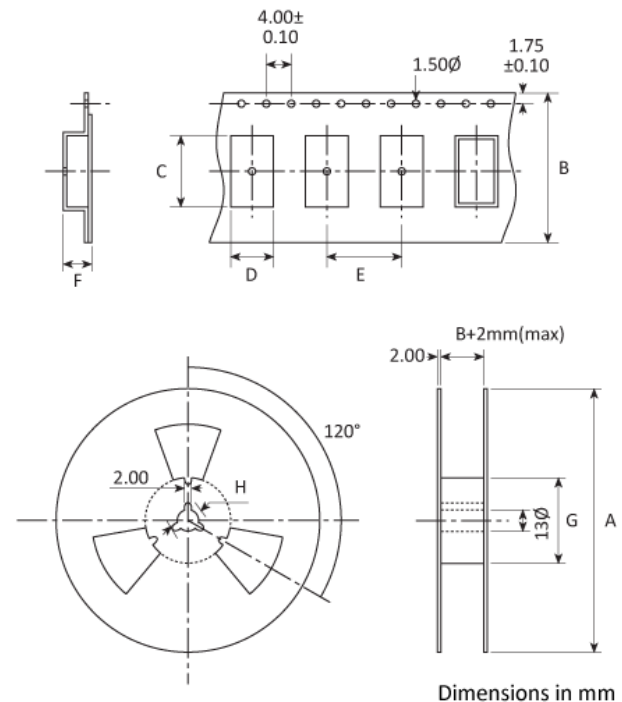
## ORDERING INFORMATION

To request a quotation for the CC6A-T1D 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:12 C:4 D:2.6 E:4 F:1.1 G:80 H:21

\*Larger reel size available. Please ask for details

## HANDLING & STORAGE



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



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

## CONSTRUCTION

Ceramic base and lid

## COMPLIANCE

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Lead-free (< 0.1% by weight)



RoHS 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](#)