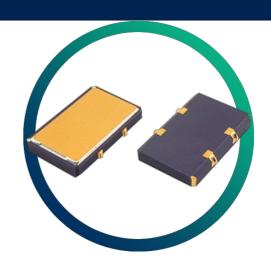
### **MCSOV**

# Low Frequency 3.3V CMOS Oscillator with -55+125°C Temperature Range

- Military temperature range -55+125°C option
- Excellent shock & vibration resistance
- Enable / disable tristate option (>500kHz)
- Wide frequency range available
- J-lead termination option

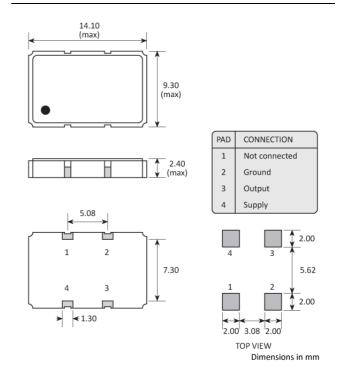


| CONFIGURABLE OPTIONS          |             |
|-------------------------------|-------------|
| Parameter                     | Option Code |
| Frequency                     |             |
| Frequency stability           |             |
| Any                           |             |
| ±100ppm                       |             |
| ±50ppm                        | T           |
| Operating temperature range   |             |
| Any                           |             |
| 0 to +70°C                    | А           |
| -40 to +85°C                  | В           |
| -55 to +125°C                 | С           |
| Enable / disable function     |             |
| Any                           |             |
| None (pad 1 NC)               |             |
| Tristate* (control via pad 1) | E           |
| * not available under 500kHz  |             |
| Terminations                  |             |
| Any                           |             |
| Gold flashed pads             |             |
| Ag/Cu/Sn plated J-leads       | J           |

#### **SPECIFICATIONS**

| Frequency range                   | 10.0kHz ~ 20.0MHz                     |
|-----------------------------------|---------------------------------------|
| Dimensions                        | 14.1 x 9.3 x 2.4mm                    |
| Supply voltage (V <sub>DD</sub> ) | +3.3V (±5%)                           |
| Storage temperature range         | -65 to +125°C                         |
| Supply current                    | 4mA max (≤10MHz)                      |
|                                   | 5mA max (>10MHz)                      |
| Driving ability                   | CMOS                                  |
| Load                              | 3pF min, 47pF max                     |
| Logic levels                      | '0' level = +0.4V max                 |
|                                   | '1' level = V <sub>DD</sub> -0.5V min |
| Start up time                     | 1ms typ, 5ms max                      |
| Waveform symmetry                 | 40:60 max @ 50%V <sub>DD</sub>        |
| Rise / fall time                  | 7ns max                               |
| Shock resistance                  | 5,000g, 0.3ms ½-sine                  |
| Vibration resistance              | 20g rms 10.0 ~ 2,000Hz                |
| Soldering condition               | 260°C, 10 sec max                     |
|                                   |                                       |

#### **PACKAGE DRAWING**



#### **ORDERING INFORMATION**

To request a quotation for the MCSOV 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.

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.

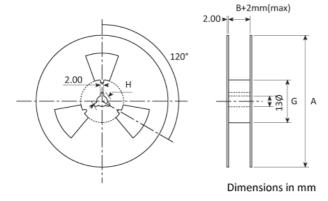
If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

#### **ENABLE / DISABLE FUNCTION**

| Input (pad 1) | Output (pad 3) |
|---------------|----------------|
| Open          | Enabled        |
| '1' level     | Enabled        |
| '0' level     | High Impedance |

#### **TAPE & REEL SPECIFICATION**

## 4.00± 0.10 1.50Ø ±0.10 Left by the second s



A:330 B:24 C:16.5 D:14.8 E:12 F:3.5 G:80 H:21

#### **HANDLING & STORAGE**



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



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

#### CONSTRUCTION

Ceramic base with Kovar lid

#### **COMPLIANCE**



Lead-free (< 0.1% by weight)



RoHS compliant with no exemptions. <u>See our</u>

declaration



REACH compliant. See our statement



Free of conflict minerals. See our declaration



Free of Halogens. <u>See our declaration</u>



Free of Ozone-depleting substances. <u>See our</u>

declaration