

MCS01EHV

3.3V High Frequency Oscillator for **Extreme Environments**

- Suitable for Avionics, Down-hole, Geothermal etc
- Extreme temperature ranges up to 210°C
- High stability & low ageing under extremes
- High shock & vibration resistance
- Optional tinned pads (Ag/Cu/Zn)



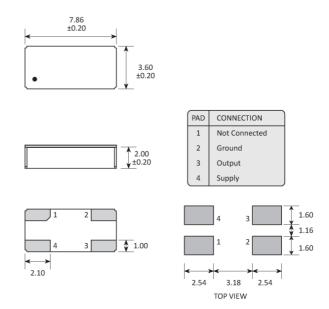
CONFIGURABLE OPTIONS	
Parameter	Option Code
Frequency	
Frequency stability	
* see note below	
Any	
±100ppm max over -55 to +125°C	С
±150ppm max over -55 to +150°C	E
±300ppm max over -55 to +175°C	D
±400ppm max over -55 to +210°C	G
Enable / disable function	
Any	
None (pad 1 NC)	
Tristate (control via pad 1)	E
Terminations	
Any	
Gold plated pads	
Tinned pads* (Ag/Cu/Zn)	Т
* not available with stability option G	



SPECIFICATIONS

Frequency range	32.0kHz ~ 100MHz
Dimensions	7.86 x 3.60 x 2.20mm
Supply voltage (V _{DD})	+3.3V (±5%)
Storage temperature range	-65 to +125°C
Supply current	20mA max
Driving ability	CMOS
Load	3pF min, 47pF max
Logic levels	'0' level = +0.4V max
	'1' level = V_{DD} -0.5V min
Start up time	5ms max
Waveform symmetry	40:60 max @ 50%V _{DD}
Rise / fall time	3ns max >20MHz
Shock resistance	10,000g, 0.3ms, ½ sine
Vibration resistance	40g rms 10.0 ~ 2,000Hz
Soldering condition	260°C, 10 sec max

PACKAGE DRAWING



A 47nF ceramic capacitor must be connected between GND and VDD Dimensions in mm

ORDERING INFORMATION

To request a quotation for the MCSO1EHV 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



HANDLING & STORAGE

CONSTRUCTION



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

Ceramic base and lid



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

COMPLIANCE



Lead-free (< 0.1% by weight)



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

declaration



REACH compliant. See our statement



Au Ta Sn W Free of conflict minerals. See our declaration



Free of Halogens. See our declaration



Free of Ozone-depleting substances. See our

declaration