

MCSO2EV

2.5 / 3.3 / 5V CMOS Oscillator - 55+210°C

- 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 (max)*	
Any	
±100ppm over -55 to +125°C	C
±150ppm over -55 to +150°C	E
±300ppm over -55 to +175°C	D
±400ppm over -55 to +210°C	G
Enable / disable function	
Any	
None (pad 1 NC)	
Active (control via pad 1, not available under 500kHz)	E
Terminations	
Any	
Gold plated pads	
Tinned Ag/Cu/Zn	T

SPECIFICATIONS

Frequency range	10.0kHz ~ 20MHz
Storage temperature range	-65 to +125°C
Supply current	32kHz : 1mA
Maximum values, no load.	≤ 10MHz : 4mA >10 ~ 20MHz : 5mA
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 times	7ns max (=20MHz, 15pF, 20~80% V_{P-P}) 3ns max (>20MHz, 15pF, 10~90% V_{P-P}) 150ns max@ 32.768kHz
Shock resistance	10,000G, 0.3ms, ½ sine
Vibration resistance	80G rms 10.0 ~ 2,000Hz
Soldering condition	260°C, 10 sec max
Supply voltage (V_{DD})	+3.3V (±5%)

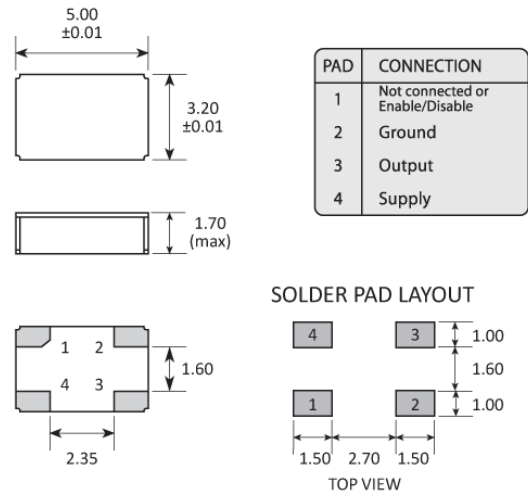
ORDERING INFORMATION

To request a quotation for the MCSO2EV 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.

PACKAGE DRAWING



A 47nF ceramic capacitor must be connected between GND and V_{DD}

Dimensions in mm

ENABLE / DISABLE FUNCTION

Input (pad 1)	Output (pad 3)
Open	Enabled
'1' level	Enabled
'0' level	No clock

Reaction time < 1μs

HANDLING & STORAGE



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



Moisture Sensitivity Level (MSL): 1

CONSTRUCTION

Ceramic base and lid

COMPLIANCE



Lead-free (< 0.1% by weight)



RoHS compliant with no exemptions.