

MCSO2EL

2.5/3.3/5V CMOS Oscillator - 55+200°C

- Extreme temperature ranges up to 200°C
- High stability & low ageing under extremes
- Low current consumption
- High shock & vibration resistance
- Optional tinned pads (Ag/Cu/Zn)



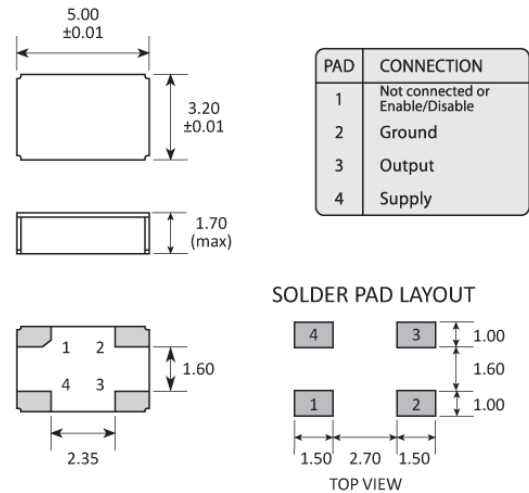
CONFIGURABLE OPTIONS

Parameter	Option Code
Frequency	
32.768kHz	
Supply voltage (V_{DD})	
Any	
+5.0V (±5%)	
+3.3V (±5%)	V
+2.5V (±5%)	W
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 +200°C	G
Enable / disable function	
Any	
None (pad 1 NC)	
Active (control via pad 1)	E
Terminations	
Any	
Gold plated pads	
Tinned Ag/Cu/Zn	T

SPECIFICATIONS

Frequency range	32.768kHz 10.0 ~ 50.0kHz
Storage temperature range	-65 to +125 °C
Supply current (32kHz)	2.5V, 110µA
Maximum values, 10pF load.	3.3V, 120µA 5.0V, 130µA
Driving ability	CMOS
Load	3pF min, 27pF 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 (load 15pF 20%~80%)	25ns 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

PACKAGE DRAWING



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

Dimensions in mm

ORDERING INFORMATION

To request a quotation for the MCSO2EL 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	No clock

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.