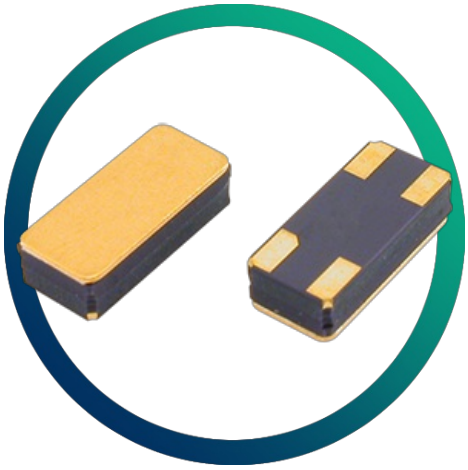
MCSO1ESW

2.5V CMOS Oscillator for Extreme Environments -55+210°C



- Extreme temperature ranges up to 210°C
- Optional tinned pads (Ag/Cu/Zn)

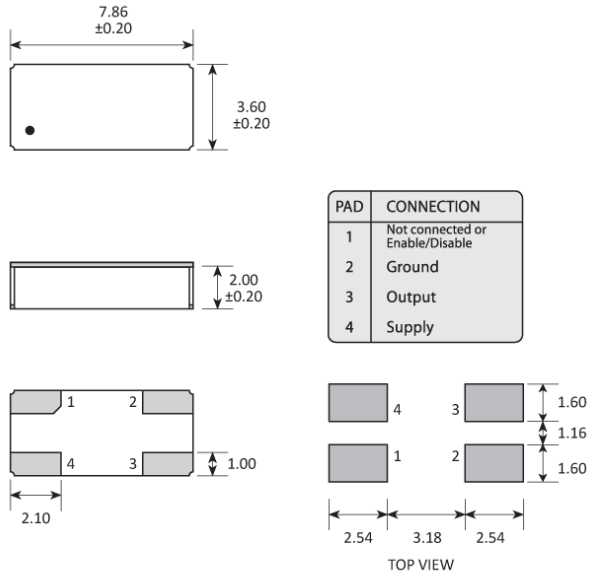
CONFIGURABLE OPTIONS

Parameter	Option Code
Frequency	
Frequency stability	
* see note below	
Any	
±50ppm max over -10 to +150°C	R
±100ppm max over -10 to +175°C	S
±150ppm max over -10 to +210°C	T
Enable / disable function	
Any	
None (pad 1 NC)	
Tristate* (control via pad 1)	E
* not available under 500kHz	
Terminations	
Any	
Gold plated pads	
Tinned pads* (Ag/Cu/Zn)	T
* not available with stability option T	

SPECIFICATIONS

Frequency range	32.0kHz ~ 30.0MHz
Dimensions	7.86 x 3.60 x 2.20mm
Supply voltage (V_{DD})	+2.5V (±5%)
Storage temperature range	-65 to +125°C
Supply current	300µA max (@32.768kHz) 2mA max (≤10MHz) 3mA max (>10MHz)
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	7ns max 150ns max @ 32.768kHz
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



PAD	CONNECTION
1	Not connected or Enable/Disable
2	Ground
3	Output
4	Supply

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

Dimensions in mm

ORDERING INFORMATION

To request a quotation for the MCSO1ESW 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


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


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

MATERIAL COMPOSITION


Lead-free (< 0.1% by weight)


RoHS 2 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

CONSTRUCTION

Ceramic base and lid

OTHER INFORMATION

About Golledge

We are the UK's leading supplier of frequency control products and are proud to serve the global electronics industry. Our philosophy is a focus firmly on your requirements by striving to meet and exceed your needs. We do this by ensuring the utmost quality and consistency in our products and services. If you have any queries about the Golledge service or any of our products please get in touch, we'd love to hear from you.

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Our customer feedback is testament to our quality; "Never had such good service as this from anyone in 35 years of being in the industry, this is impressive and has really helped us out of a corner to keep the design flowing" Andy (Senior Design Engineer), "As always your support is state of the art" Nicoleta (Material Management), "Legendary work - as usual it has to be said" John (Operations).
To take advantage of our highly praised service get in touch with us today.