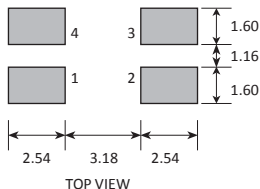


PAD	CONNECTION
1	Not connected or Enable/Disable
2	Ground
3	Output
4	Supply



Features

- ▶ Suitable for Avionics, Down-hole, Geothermal etc
- ▶ Extreme temperature ranges up to 200°C
- ▶ High stability & low ageing under extremes
- ▶ High shock & vibration resistance
- ▶ Low current consumption

Enable / Disable Function

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

Specifications

Parameters	Product	Option Codes
	MCSO1EL	
Frequency range: 32.768kHz 10.0 ~ 50.0kHz	■ □	specify
Supply voltage (V_{DD}): +5.0V (±5%) +3.3V (±5%) +2.5V (±5%)	■ □ □	V W
Frequency stability (max)*: ±300ppm over -55 to +175°C ±400ppm over -55 to +200°C	□ □	D G
Storage temperature range: -55 to +125°C	■	
Supply current (max @ 32.768kHz): 120µA, V _{DD} =5.0V 110µA, V _{DD} =3.3V 100µA, V _{DD} =2.5V	■ ■ ■	
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: 25ns max (15pF, 20%~80%)	■	
Enable / disable function: None (pad 1 NC) Tristate (control via pad 1)	■ □	E
Standby current: 5µA max	■	
Shock resistance: 10,000G, 0.3ms, ½ sine	■	
Vibration resistance: 40G rms 10.0 ~ 2,000Hz	■	
Soldering condition: 260°C, 10 sec max	■	

■ Standard. □ Optional - Please specify required code(s) when ordering

* Frequency stability is inclusive of calibration @ 25°C, operating temperature range, supply voltage change, load change and ageing (1 year).

Ordering Information

Product name + option codes + frequency

eg: **MCSO1EL/DE 32.768kHz** 5V ±300ppm -55 to +175°C Enable / disable

MCSO1EL/WG 32.768kHz 2.5V ±400ppm -55 to +200°C no E/D

Option code X (eg MCSO1EL/X) denotes a custom specification.

♦ Packed in trays (91pcs/tray), or T&R 250 ~ 1,000pcs / reel