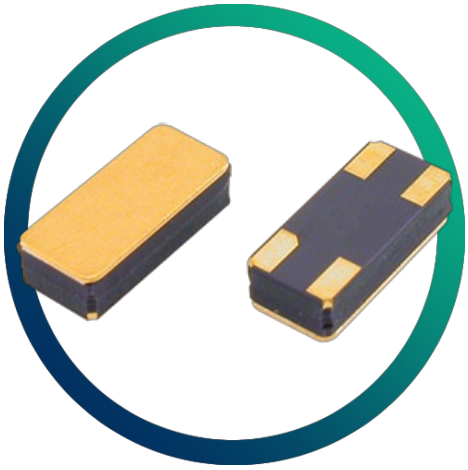
MCSO1FZ

1.8V CMOS Oscillator with Low Jitter



- Low jitter
- Military temperature range -55+125°C option
- Excellent shock & vibration resistance
- Enable / disable tristate option (>500kHz)
- Optional tinned pads (Ag/Cu/Zn)

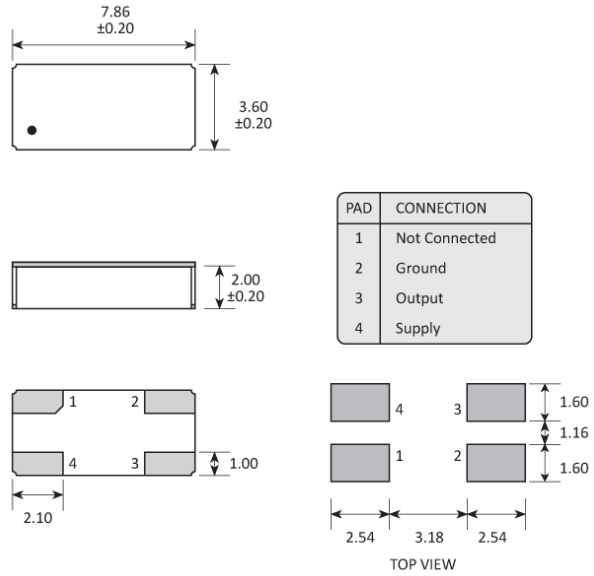
CONFIGURABLE OPTIONS

Parameter	Option Code
Frequency	
Frequency stability	
* see note below	
Any	
±100ppm	
±50ppm	T
Operating temperature range	
Any	
0 to +70°C	A
-40 to +85°C	B
-55 to +125°C	C
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

SPECIFICATIONS

Frequency range	10.0kHz ~ 20.0MHz
Dimensions	7.86 x 3.60 x 2.20mm
Supply voltage (V_{DD})	+1.8V (±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}
Jitter RMS (1σ)	< 2ps
Rise / fall time	7ns max 150ns max @ 32.768kHz
Shock resistance	5,000g, 0.3ms ½-sine
Vibration resistance	20g rms 10.0 ~ 2,000Hz
Soldering condition	260°C, 10 sec max

PACKAGE DRAWING



PAD	CONNECTION
1	Not Connected
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 MCSO1FV 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)

CONSTRUCTION

Ceramic base with kovar lid

COMPLIANCE


Lead-free (< 0.1% by weight)


RoHS 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