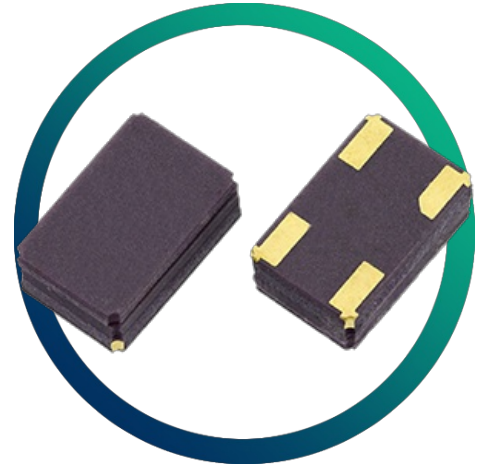


MCSO6FV

Miniature 3.3V Low Jitter Oscillator with Extended Temperature Range of -55+125°C



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

CONFIGURABLE OPTIONS

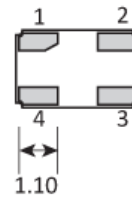
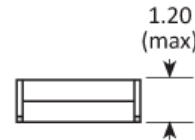
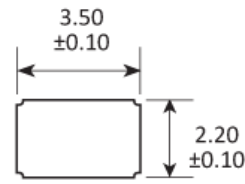
Parameter	Option Code
Frequency	
Frequency stability	
* see note below	
Any	
±100ppm	
±50ppm	T
Enable / disable function	
Any	
None (pad 1 NC)	
Active* (control via pad 1)	E
* not available under 500kHz	
Operating temperature range	
Any	
0 to +70°C	A
-40 to +85°C	B
-55 to +125°C	C
Terminations	
Any	
Gold plated pads	
Tinned pads Ag/Cu/Sn	T

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

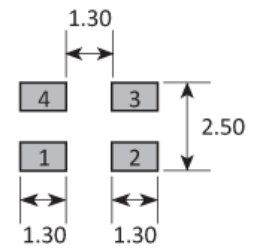
SPECIFICATIONS

Frequency range	10.0kHz ~ 155MHz
Dimensions	3.5 x 2.2 x 1.2mm
Supply voltage (V_{DD})	+3.3V ($\pm 5\%$)
Storage temperature range	-65 to +125°C
Supply current	1mA max (@32.768kHz) 4mA max (≤ 10 MHz) 5mA max ($> 10.0 \sim 20.0$ MHz) 30mA max (> 20.0 MHz)
Driving ability	CMOS
Load	3pF min, 47pF max
Logic levels	'0' level = +0.4V max '1' level = $V_{DD} - 0.5$ V min
Start up time	5ms max
Waveform symmetry	40:60 max @ 50% V_{DD}
Jitter RMS (1 σ)	< 2ps (≤ 20.0 MHz) < 10ps (> 20.0 MHz)
Rise / fall time	7ns max (15pF, 20~80% V_{p-p}) 150ns max @ 32.768kHz
Shock resistance	5,000g, 0.3ms, ½ sine
Vibration resistance	50g rms 10.0 ~ 2,000Hz
Soldering condition	260°C, 10 sec max

PACKAGE DRAWING



SOLDER PAD LAYOUT



TOP VIEW

PAD	CONNECTION
1	Enable/Disable
2	Ground
3	Output
4	Supply

Dimensions in mm

ORDERING INFORMATION

To request a quotation for the MCSO6FV 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

Reaction time < 1 μ s

HANDLING & STORAGE



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



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

CONSTRUCTION

Ceramic base and 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](#)