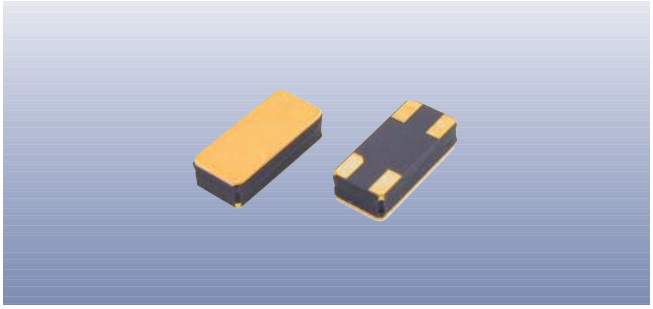
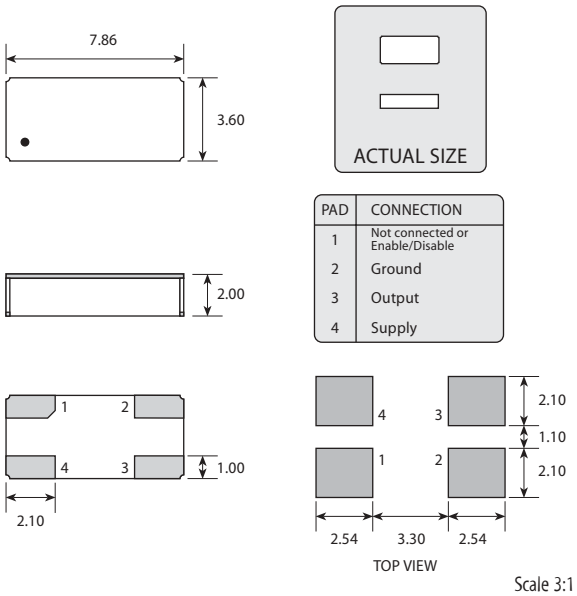
5V CMOS Oscillator Mil Temp

MCSO1 & MCSO1H





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

Scale 3:1

Features

- **Military temperature range option**
- **Excellent shock & vibration resistance**
- **Enable / disable tristate option (>500kHz)**
- **Wide frequency range available**

Standard Frequencies

Frequencies in MHz				
10.00000*	19.20000*	52.00000	76.80000	108.00000
10.15000*	19.66080*	55.29600	78.00000	110.59200
10.23000*	20.00000*	58.98240	80.00000	117.96400
10.24000*	40.00000	60.00000	81.20000	120.00000
11.05920*	40.60000	60.90000	81.84000	125.00000
12.00000*	40.96000	61.38000	81.92000	128.00000
12.28800*	44.23680	61.44000	88.47360	131.07200
12.80000*	48.00000	64.00000	90.00000	132.71040
13.00000*	49.15200	65.00000	96.00000	144.00000
14.74560*	50.00000	65.53600	98.30400	150.00000
16.00000*	50.75000	66.35520	100.00000	160.00000
16.38400*	51.15000	72.00000	102.40000	
18.43200*	51.20000	73.72800	104.00000	

* Binary divisions of the above frequencies also available.

Enable / Disable Function

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

Specifications

MCSO1: 400kHz ~ 20.0MHz

MCSO1H: 20.0 ~ 160MHz

Parameters	Product		Option Codes
	MCSO1	MCSO1H	
Frequency range:			
400kHz ~ 20.0MHz	■		
20.0 ~ 160MHz		■	
Frequency stability*: ±100ppm	■	■	
±50ppm	□	□	T
tighter stabilities on request	□	□	specify
Operating temperature range:			
0 to +70°C	■	■	A
-40 to +85°C	□	□	B
-55 to +125°C	□	□	C
Operable temperature range: -55 to +125°C	■	■	
Storage temperature range: -65 to +125°C	■	■	
Supply voltage (V_{DD}): +5.0V (±10%)	■	■	
Supply current (max): 15mA	■		
50mA		■	
Driving ability: CMOS / 10 LSTTL	■	■	
Logic levels: '0' level = +0.4V max	■	■	
'1' level = 90%V_{DD} min	■	■	
Start up time: 5ms max	■	■	
Waveform symmetry: 40:60 max @ 50%V_{DD}	■	■	
Rise / fall times: 7ns max	■		
3ns max		■	
Enable / disable function:			
None (pad 1 NC)	■	■	
Tristate* (control via pad 1)	□	□	E
* not available under 500kHz			
Shock resistance: 5,000G, 0.3ms, ½ sine	■	■	
Vibration resistance: 10G 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 over 10 years.

Ordering Information

Product name + option codes (if any) + frequency

eg: **MCSO1/TBE 16.0MHz** ±50ppm -40 to +85°C Enable / disable

MCSO1H/C 90.0MHz ±100ppm -55to +125°C

Option code X (eg MCSO1/X) denotes a custom specification.

- Packed in trays (50pcs/tray).

Tel: **+44 1460 256 100** Fax: **+44 1460 256 101** E-mail: **sales@golledge.com** Web: **www.golledge.com**

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