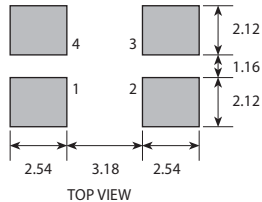
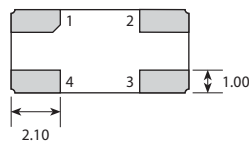


PAD	CONNECTION
1	Not connected or Enable/Disable
2	Ground
3	Output
4	Supply



Scale 3:1

**Specifications**

**MCSO1V: 400kHz ~ 20.0MHz**

**MCSO1HV: 20.0 ~ 160MHz**

Parameters	Product		Option Codes
	MCSO1V	MCSO1HV	
Frequency range: 400kHz ~ 20.0MHz 20.0 ~ 160MHz	■	■	
Frequency stability*: ±100ppm ±50ppm tighter stabilities on request	■ □ □	■ □ □	T specify
Operating temperature range: 0 to +70°C -40 to +85°C -55 to +125°C	■ □ □	■ □ □	A B C
Operable temperature range: -55 to +125°C	■	■	
Storage temperature range: -65 to +125°C	■	■	
Supply voltage (V <sub>DD</sub> ): +3.3V (±10%)	■	■	
Supply current (max): 10mA 30mA	■	■	
Driving ability: CMOS	■	■	
Logic levels: '0' level = +0.4V max '1' level = 90%V <sub>DD</sub> min	■ ■	■ ■	
Start up time: 5ms max	■	■	
Waveform symmetry: 40:60 max @ 50%V <sub>DD</sub>	■	■	
Rise / fall times: 7ns max 3ns max	■	■	
Enable / disable function: None (pad 1 NC) Tristate* (control via pad 1) * not available under 500kHz	■ □	■ □	E
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.

**Features**

- ▶ Military temperature range option
- ▶ Excellent shock & vibration resistance
- ▶ Enable / disable tristate option (> 500kHz)
- ▶ Ceramic package with metal lid

**Standard Frequencies**

Frequencies in MHz				
10.0000*	19.2000*	52.0000	76.8000	108.0000
10.1500*	19.6608*	55.2960	78.0000	110.5920
10.2300*	20.0000*	58.9824	80.0000	117.9640
10.2400*	40.0000	60.0000	81.2000	120.0000
11.0592*	40.6000	60.9000	81.8400	125.0000
12.0000*	40.9600	61.3800	81.9200	128.0000
12.2880*	44.2368	61.4400	88.4736	131.0720
12.8000*	48.0000	64.0000	90.0000	132.7104
13.0000*	49.1520	65.0000	96.0000	144.0000
14.7456*	50.0000	65.5360	98.3040	150.0000
16.0000*	50.7500	66.3552	100.0000	160.0000
16.3840*	51.1500	72.0000	102.4000	
18.4320*	51.2000	73.7280	104.0000	

\* 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

**Ordering Information**

Product name + option codes (if any) + frequency  
 eg: **MCSO1V/TBE 16.0MHz** ±50ppm -40 to +85°C Enable / disable  
**MCSO1HV/C 81.840MHz** ±100ppm -55 to +125°C  
 Option code X (eg MCSO1V/X) denotes a custom specification.  
 ♦ Packed in trays (91pcs/tray).