



## Features

- Military temperature range option
- Excellent shock & vibration resistance
- Enable / disable tristate option (> 500kHz)
- J-leads option

## 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

**MCSO: 10.0kHz ~ 20.0MHz**

**MCSOH: 20.0 ~ 160MHz**

Parameters	Product		Option Codes
	MCSO	MCSOH	
<b>Frequency range:</b> 10.0kHz ~ 20.0MHz 20.0 ~ 160MHz	■	■	
<b>Frequency stability*:</b> ±100ppm ±50ppm tighter stabilities on request	■ □ □	■ □ □	T specify
<b>Operating temperature range:</b> 0 to +70°C -40 to +85°C -55 to +125°C	■ □ □	■ □ □	A B C
<b>Operable temperature range:</b> -55 to +125°C	■	■	
<b>Storage temperature range:</b> -65 to +125°C	■	■	
<b>Supply voltage (V<sub>DD</sub>):</b> +5.0V (±10%)	■	■	
<b>Supply current (max):</b> 15mA 50mA	■	■	
<b>Driving ability:</b> CMOS / 10 LSTTL	■	■	
<b>Logic levels:</b> '0' level = +0.4V max '1' level = 90%V <sub>DD</sub> min	■ ■	■ ■	
<b>Start up time:</b> 5ms max	■	■	
<b>Waveform symmetry:</b> 40:60 max @ 50%V <sub>DD</sub>	■	■	
<b>Rise / fall times:</b> 7ns max 3ns max	■	■	
<b>Enable / disable function:</b> None (pad 1 NC) Tristate* (control via pad 1) * not available under 500kHz	■ □	■ □	E
<b>Terminations:</b> Stand-offs J-leads (drawing on request)	■ □	■ □	J
<b>Shock resistance:</b> 5,000G, 0.3ms, ½ sine	■	■	
<b>Vibration resistance:</b> 10G rms 10.0 ~ 2,000Hz	■	■	
<b>Soldering condition:</b> 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: **MCSO/BE 16.0MHz** ±100ppm -40 to +85°C Enable / disable

**MCSOH/TAJ 80.0MHz** ±50ppm 0 to +70°C, J-leads

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

- ◆ Available on T&R (1k pcs/reel) or trays (50pcs/tray).
- ◆ Refer to our website for T&R and soldering details.