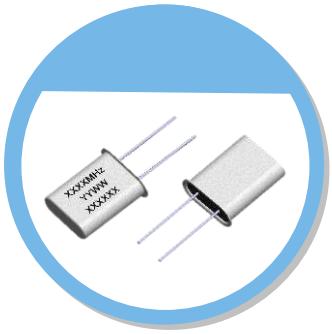
X8(HC-43/U) Type

FEATURE

- Gold Electrode
- Vacuum Sealed
- High Q Value
- High Stability
- Good Aging and Reliability

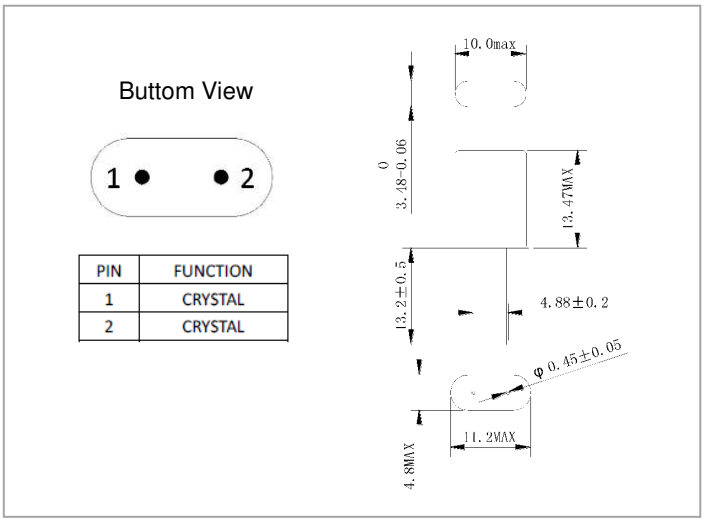


RoHS Compliant

TYPICAL APPLICATION

- Precision OCXO, VCXO and TCXO oscillators

DIMENSION (mm)



EQUIVALENT SERIES RESISTANCE (E.S.R)

Frequency Range	MODE(Cut)	E.S.R.
4 MHz≦Fo≦8 MHz	AT Fundamental	≦20Ω
8 MHz＜Fo≦10 MHz	AT 3rd OT	≦50Ω
10 MHz＜Fo≦20 MHz	AT 3rd OT	≦50Ω
20 MHz＜Fo≦50 MHz	AT 3rd OT	≦20Ω
50 MHz＜Fo≦100 MHz	AT 5th OT	≦80Ω
10 MHz＜Fo≦20 MHz	SC 3rd OT	≦105Ω
20 MHz＜Fo≦40 MHz	SC 3rd OT	≦60Ω

ELECTRICAL SPECIFICATION

Parameter	Min.	Typical	Max.	Unit
Operating Temp. Range	-55		+125	°C
Standard Frequency	10, 12.8, 13, 16.384			MHz
Turn Point	+75°C to +105°C (mode, cut, frequency dependent, other turn points available)			°C
Frequency Tolerance @ Turn Point			±5	ppm
Level of Drive		100	500	μW
Shunt Capacitance (C0)			7.0	pF
Insulation Resistance	500MΩ @ DC100V			
Aging	±0.05 to ±1.0			ppm/year

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

STANDARD OPTIONS

Nominal Frequency(MHz)	MODE(Cut)	R(Ω)	C0(pF)	C1(fF)	Q(Typical)	Aging(ppm/year)
10 MHz	AT 3rd OT	＜45	＜2.6	0.44 ± 20%	645k	0.3
12.8 MHz	AT 3rd OT	＜45	＜2.6	0.85 ± 20%	460k	0.5
16.384 MHz	AT 3rd OT	＜30	＜3.8	1.60 ± 20%	420k	0.5
10 MHz	SC 3rd OT	＜105	＜2.6	0.19 ± 20%	1,000k	0.05
12.8 MHz	SC 3rd OT	＜90	＜2.6	0.19 ± 20%	800k	0.06
13 MHz	SC 3rd OT	＜90	＜2.6	0.19 ± 20%	800k	0.06
16.384 MHz	SC 3rd OT	＜85	＜3.0	0.18 ± 20%	700k	0.06

Note: not all combination of options are available. Other specifications may be available upon request.