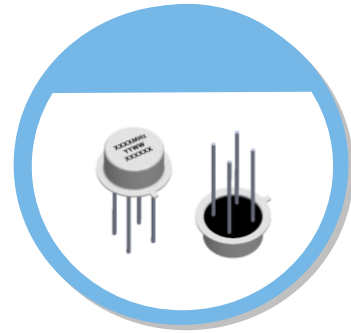


X6(HC-35U) Type

FEATURE

- Gold Electrode
- Vacuum Sealed
- Miniature
- Medium and Higher Frequency
- Low Phase Noise
- Good Aging
- Excellent Shock and Vibration Performance due to 4 Point Mounting
- Fast Warm Up

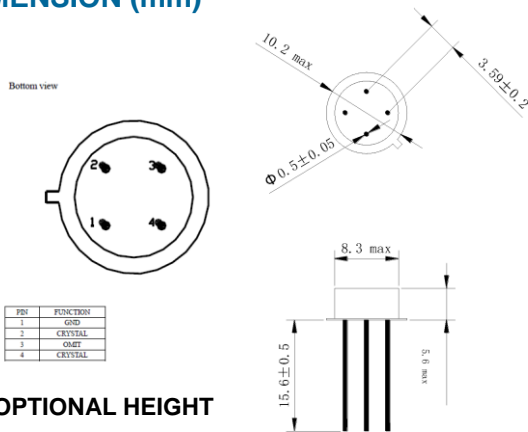


RoHS Compliant

TYPICAL APPLICATION

- Precision OCXO, VCXO and TCXO oscillators

DIMENSION (mm)



PIN	FUNCTION
1	GND
2	CRYSTAL
3	OUT
4	CRYSTAL

OPTIONAL HEIGHT

4.0mm 5.6mm

EQUIVALENT SERIES RESISTANCE (E.S.R)

Frequency Range	MODE(Cut)	E.S.R.
19.2 MHz ≤ Fo ≤ 22 MHz	SC 3 rd OT	≤ 100Ω
22 MHz < Fo ≤ 30 MHz	SC 3 rd OT	≤ 60Ω
30 MHz < Fo ≤ 80 MHz	SC 3 rd OT	≤ 70Ω
80 MHz < Fo ≤ 120 MHz	SC 5 th OT	≤ 120Ω

ELECTRICAL SPECIFICATION

Parameter	Min.	Typical	Max.	Unit
Operating Temp. Range	-55		+125	°C
Standard Frequency	20, 40, 50, 100			MHz
Turn Point	+75 °C to +105 °C (mode, cut, frequency dependent, other turn points available)			°C
Frequency Tolerance @ Turn Point	±1.5	±5	±8	ppm
Level of Drive		100	500	μW
Shunt Capacitance (C0)			5.0	pF
Insulation Resistance	500MΩ @ DC100V			
Aging	±0.05 to ±0.5			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)
20 MHz	SC 3 rd OT	< 80	< 3.5	0.39 ~ 0.53	400k	0.1
40 MHz	SC 3 rd OT	< 60	< 4.0	0.30 ~ 0.55	220k	0.1
50 MHz	SC 3 rd OT	< 60	< 4.5	0.25 ~ 0.45	150k	0.3
100 MHz	SC 5 th OT	< 110	< 4.8	0.12 ~ 0.22	120k	0.5

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

Specifications subject to change without notice