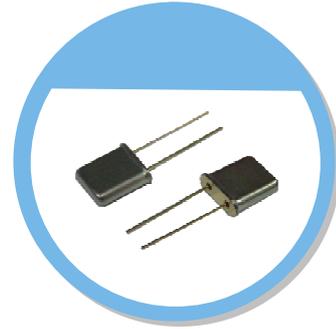


XH(UM-1) Type

FEATURE

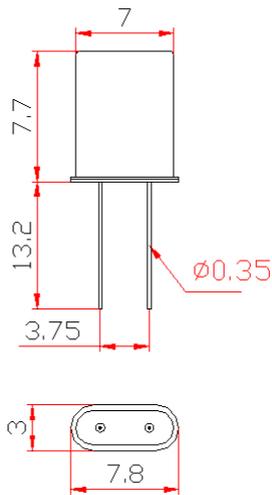
- 7.3 x 2.6 x 7.8 mm UM-1 Resistance Weld
- Gold electrode, vacuum
- Fast warm up
- High stability, low temperature frequency coefficient
- Good aging and reliability



TYPICAL APPLICATION

- Precision OCXO, VCXO and TCXO oscillators

DIMENSION (mm)



EQUIVALENT SERIES RESISTANCE (E.S.R)

Frequency Range	MODE(Cut)	E.S.R.
8 MHz ≤ Fo ≤ 10 MHz	AT Fundamental	≤ 40Ω
10 MHz < Fo ≤ 20 MHz	AT Fundamental	≤ 35Ω
20 MHz < Fo ≤ 40 MHz	AT 3 rd OT	≤ 30Ω
40 MHz < Fo ≤ 80 MHz	AT 3 rd OT	≤ 30Ω
5 MHz ≤ Fo ≤ 10 MHz	SC Fundamental	≤ 50Ω
10 MHz < Fo ≤ 20 MHz	SC Fundamental	≤ 40Ω
20 MHz < Fo ≤ 40 MHz	SC 3 rd OT	≤ 100Ω

ELECTRICAL SPECIFICATION

Parameter	Min.	Typical	Max.	Unit
Operating Temp. Range	-55		+125	°C
Standard Frequency	20, 24, 25.6, 26, 38.88, 40			MHz
Turn Point	+75°C to +105°C (mode, cut, frequency dependent, other turn points)			°C
Frequency Tolerance @ Turn	±3	±5	±10	ppm
Level of Drive		100	500	μW
Shunt Capacitance (C0)			7.0	pF
Insulation Resistance	500MΩ @ DC100V			
Aging	±0.5 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	MODE(Cut)	R(Ω)	C0(pF)	C1(fF)	Q(Typical)	Aging(ppm/year)
20 MHz	AT 3 rd OT	< 35	< 3.0	0.93 ± 20%	380k	0.5
24 MHz	AT 3 rd OT	< 30	< 3.0	1.07 ± 20%	350k	0.5
26 MHz	AT 3 rd OT	< 30	< 3.0	1.16 ± 20%	270k	0.5
38.88 MHz	AT 3 rd OT	< 30	< 4.0	1.54 ± 20%	220k	0.5
20 MHz	SC 3 rd OT	< 100	< 3.0	0.16 ± 20%	600k	0.1
25.6 MHz	SC 3 rd OT	< 60	< 3.2	0.35 ± 20%	400k	0.1
40 MHz	SC 3 rd OT	< 60	< 4.5	0.36 ± 20%	300k	0.2