

The HC-45/U cold weld enclosure is ideally suited for the manufacture of precision AT and SC cut high reliability resonators where space is limited.

The smallest available package in the quartz crystal cold weld series.

The small volume allows for fast thermal transmission and the high vacuum environment ensures the best possible ageing and phase noise performance.

Custom specified with typical data as follows:

Specification data:

Adjustment tolerance

Environment high vacuum **Quartz orientation** AT, SC, IT cut

Frequency range (8 ~ 35)MHz fundamental (20 ~ 110)MHz 3rd overtone

(60 ~ 175)MHz 5th overtone (110 ~ 200)MHz 7th overtone from ±3.0ppm at ref. temp. frequency dependent

Thermal stability OCXO turn point from ±3°C

TCXO from ±0.5' equivalent Ø angle XO from ±3ppm temperature dependent

Operating temperature (-55 +105)°C

Storage temperature (-40 +105)°C custom specified

Shunt capacitance C (1.5 ~ 5.5)pF

Suggested drive level $(7.5 \sim 3.5)\mu$ V $(5 \sim 150)\mu$ W

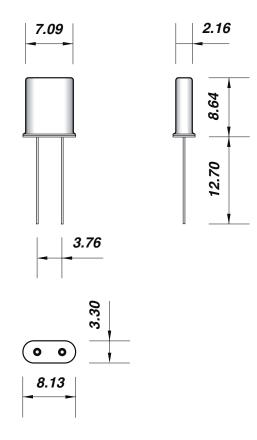
Q factor up to 400K, frequency, cut and mode dependent

Ageing - frequencyAT cut: ±0.5ppm typical,dependentfirst year max.

SC cut: ±0.2ppm typical,

 $\begin{array}{ll} \textit{first year max.} \\ \textit{Insulation resistance} & 500 \textit{Meg. } \Omega \textit{ min.} \\ \textit{at } 100 \textit{Vd.c.} \end{array}$

Dimensions(mm)



lead diameter 0.38

