

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.

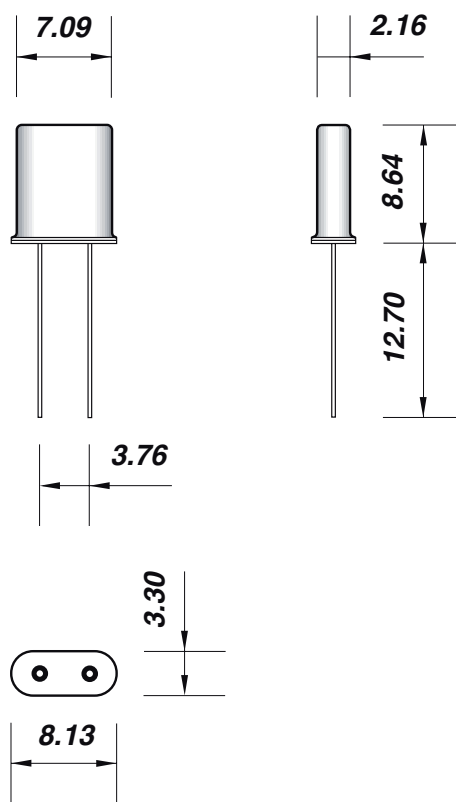
The small volume allows for fast thermal transmission and the high vacuum environment ensures the best possible ageing and phase noise performance.

Custom specified with typical data as follows:

**Specification data:**

<b>Environment</b>	high vacuum
<b>Quartz orientation</b>	AT, SC, IT cut
<b>Frequency range</b>	(8 ~ 35)MHz fundamental (20 ~ 110)MHz 3rd overtone (60 ~ 175)MHz 5th overtone (110 ~ 200)MHz 7th overtone
<b>Adjustment tolerance</b>	from $\pm 3.0$ ppm at ref. temp. frequency dependent
<b>Thermal stability</b>	OCXO turn point from $\pm 3^\circ\text{C}$ TCXO from $\pm 0.5^\circ$ equivalent $\emptyset$ angle XO from $\pm 3$ ppm temperature dependent
<b>Operating temperature</b>	$(-55 + 105)^\circ\text{C}$ custom specified
<b>Storage temperature</b>	$(-40 + 105)^\circ\text{C}$
<b>Load</b>	custom specified
<b>Shunt capacitance <math>C_0</math></b>	(1.5 ~ 5.5)pF
<b>Suggested drive level</b>	(5 ~ 150) $\mu\text{W}$
<b>Q factor</b>	up to 400K, frequency, cut and mode dependent
<b>Ageing - frequency dependent</b>	AT cut: $\pm 0.5$ ppm typical, first year max. SC cut: $\pm 0.2$ ppm typical, first year max.
<b>Insulation resistance</b>	500Meg. $\Omega$ min. at 100Vd.c.

**Dimensions(mm):**



**lead diameter 0.38**