

The MIL standard HC-47/U cold weld enclosure is ideally suited for the manufacture of precision SC cut and AT cut high reliability resonators.

The larger volume of this package allows for a lower frequency of operation and a higher order of overtone for ultimate performance.

A high vacuum environment provides the best conditions for long term ageing and a high Q factor.

Custom specified with typical data as follows:

Specification data:

Environment	high vacuum
Quartz orientation	AT, SC and IT cut
Frequency range	(2 ~ 25)MHz fundamental (5 ~ 75)MHz 3rd overtone (15 ~ 125)MHz 5th overtone
Adjustment tolerance	from ± 3.0 ppm at ref. temp. frequency dependent
Thermal stability	OCXO turn point from $\pm 3^\circ\text{C}$ TCXO from $\pm 0.5^\circ$ equivalent \emptyset angle XO from ± 3 ppm temperature dependent
Operating temperature	$(-55 + 105)^\circ\text{C}$ custom specified
Storage temperature	$(-40 + 105)^\circ\text{C}$
Load	custom specified
Shunt capacitance C_0	$(3.0 \sim 8.5)\mu\text{F}$
Suggested drive level	$(5 \sim 150)\mu\text{W}$
Q factor	up to 2 million, frequency, mode and cut dependent
Ageing - frequency dependent	AT cut: ± 0.5 ppm typical, first year max. SC cut: ± 0.2 ppm typical, first year max.
Insulation resistance	500Meg. Ω min. at 100Vd.c.

Dimensions(mm)

