

The LT-5 series provide custom specified ultra-miniature high quality quartz resonators over the frequency range of 15MHz ~ 175MHz. It is the smallest available leaded package and ideally suited where a quality resonator is required within a limited space. Identical pitch and lead diameter to slightly larger UM-1, UM-5 and HC-45 packages makes direct substitution possible.

The low volumetric, light weight package is ideal for tight specification wildlife tracking applications. Weighing a mere 0.24g it is a popular choice for fish tags and avian monitoring transceivers.

The very low mass combined with gold plated electrodes results in good shock and vibration and long term ageing performance.

An excellent resonator for miniature OCXO applications where small size and minimum warm up time are critical with an optional vacuum braze seal which further improves long term ageing, Q and phase noise.

Specification data:

Environment	dry Nitrogen/ vacuum option
Quartz orientation	AT cut
Frequency range	(15 ~ 40)MHz fundamental (39 ~ 105)MHz 3rd overtone (100 ~ 175)MHz 5th overtone
Adjustment tolerance	from ±3ppm at +25°C frequency dependent
Thermal stability	OCXO turn point from ±3°C TCXO from ±0.5' equivalent Ø angle XO from ±3ppm temperature range dependent
Operating temperature	(-55 +125)°C custom specified
Storage temperature	(-40 +125)°C
Load	custom specified
Shunt capacitance C₀	(1.5 ~ 5.0)pF
Suggested drive level	(5 ~ 150)µW
Q factor	up to 400K, frequency, mode and cut dependent
Ageing - frequency dependent	AT cut: ±1ppm typical, first year max. SC cut: ±0.5ppm typical, first year max.
Insulation resistance	500Meg. Ω min. at 100Vd.c.

Dimensions(mm)

