



The LT-4 series provide custom specified ultraminiature 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-4, 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 0.17g 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. SC cut and IT cut

AT cut. SC cut and IT cut possible with vacuum braze

option

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 $\pm 3^{\circ}$ C TCXO from $\pm 0.5^{'}$

equivalent Ø angle XO from ±3ppm

temperature range dependent

Operating temperature (-55 +125)°C

Storage temperature $(-40 + 125)^{\circ}C$ Load $(-40 + 125)^{\circ}C$ custom specified $(-50 + 150)^{\circ}C$ Shunt capacitance $(-50 + 150)^{\circ}C$

Suggested drive level (7.3 \sim 5.0)pr Suggested drive level (5 \sim 150) μ W up to 400K, frequency,

mode and cut dependent

Ageing - frequency

AT cut: ±1ppm typical, first

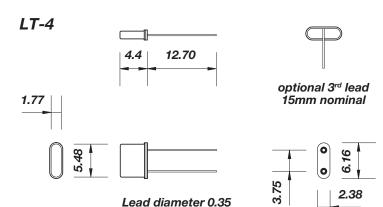
dependent year max.

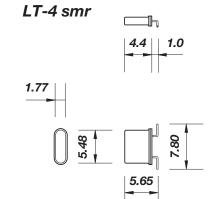
SC cut: ±0.5ppm typical, first

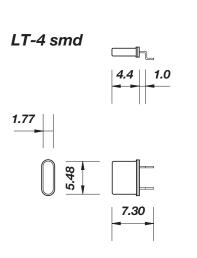
year max. 500Meg. Ω min.

Insulation resistance 500Meg. Ω min at 100Vd.c.

Dimensions(mm)

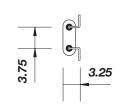






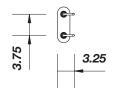


optional 3rd lead 15mm nominal





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ISO9001: 20008

A1511CAN

