

A low profile smd enclosure in which precision SC cut, AT cut and IT cut crystals may be encapsulated. The SMP-8 utilizes a braze seal and is assembled in a vacuum resulting in higher Q values and therefore improved phase noise.

Excellent heat transfer through the metal and ceramic package provide opportunities to improve thermal designs for OCXO.

Four point mounting provides excellent shock and vibration performance with good immunity to G sensitivity.

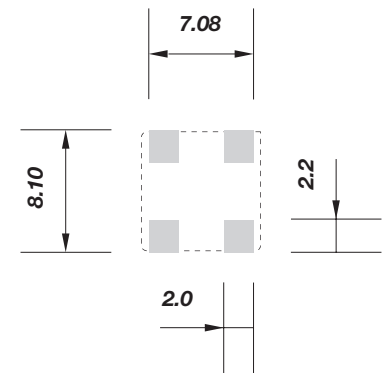
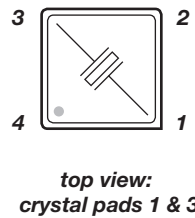
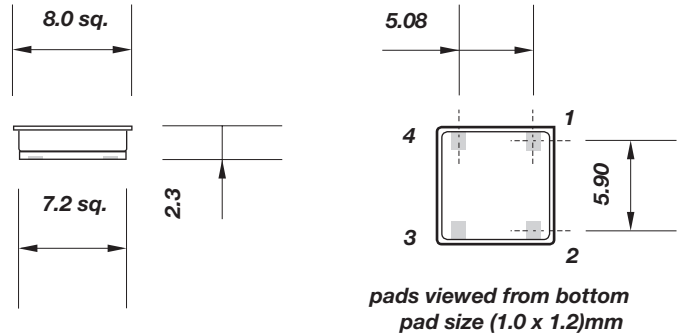
High temperature batch sealing at ultra high vacuum ensures superb long term stability.

Custom specified with typical data as follows:

Specification data:

Environment	High vacuum
Quartz orientation	SC cut AT cut or IT cut
Frequency range	(8 ~ 25)MHz fundamental (20 ~ 70)MHz 3rd overtone (60 ~ 130)MHz 5th overtone
Adjustment tolerance	from ± 2 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	(-40 ~ +200) $^\circ\text{C}$ custom specified
Storage temperature	(-40 +160) $^\circ\text{C}$ custom specified
Load	(1.5 ~ 6.5)pF
Shunt capacitance C₀	(5 ~ 150) μW
Suggested drive level	up to 400,000 frequency and mode dependent
Q factor	AT cut: ± 2 ppm typical, first year max. SC cut: ± 0.4 ppm typical, first year max.
Ageing - frequency dependent	500Meg. Ω min. at 100Vd.c.
Insulation resistance	

Dimensions(mm)



suggested land pattern

pads are gold 2.5 μ min. over nickel, suitable for vapour phase or reflow soldering, preheat +150 $^\circ\text{C}$ for 2 minutes, peak temperature +250 $^\circ\text{C}$ for 30 seconds max.