



**LAP-TECH INC.**

"Focused on Frequency"



## HIGH PERFORMANCE 10 MHz AT HC45

## HC45HQF1 SERIES

### NEW PRODUCT ADVISORY NOVEMBER 2008

Introducing a new quartz device to achieve high performance in a small package.

### DETAILS

Lap-Tech has developed a fundamental mode 10 MHz AT cut resonator in an HC45/U cold weld package for precision applications.

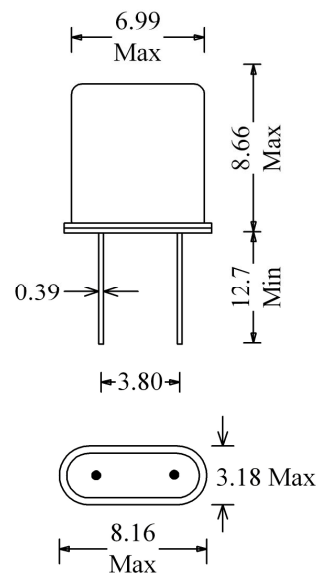
A unique blank design combined with a high vacuum enclosure produces a remarkably high Q factor in excess of 300K and excellent curve fit performance of  $< 0.25$  ppm from  $-55^{\circ}\text{C}$  to  $105^{\circ}\text{C}$ .

The Q factor is in line with 3<sup>rd</sup> overtone designs that need a larger package but has the added advantage of higher motional capacitance in the range of 0.5 fF.

Suitable for both TCXO and OCXO applications, this resonator can be designed to operate with reference temperatures as high as  $100^{\circ}\text{C}$ .

Typical parameters for 10 MHz operation:

- Set Tolerance as low as  $\pm 5$  ppm
- Reference temperatures up to  $100^{\circ}\text{C}$  for OCXO
- Operating temp range  $-55^{\circ}\text{C}$  +  $105^{\circ}\text{C}$  for TCXO
- UTTP  $\pm 5^{\circ}\text{C}$  for OCXO
- C1 0.5fF Typical
- ESR  $10\Omega$  typical
- Q 300K – 400K



For a quote or samples contact:

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