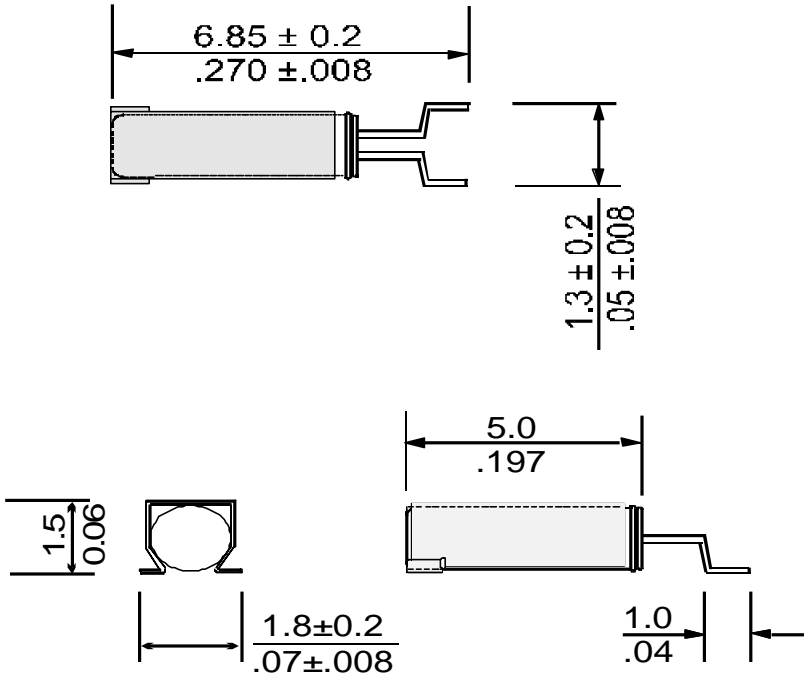
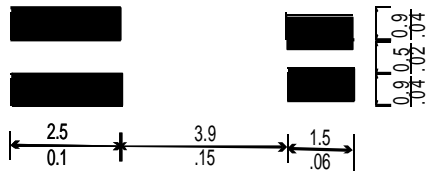


|               |     |                 |          |          |
|---------------|-----|-----------------|----------|----------|
| NEXT ASSEMBLY |     | REVISIONS       |          |          |
|               | LTR |                 | DATE     | APPROVED |
|               | A   | INITIAL RELEASE | 12/08/11 | FP       |
|               |     |                 |          |          |



**SPECIFICATIONS:**

|                               |                      |
|-------------------------------|----------------------|
| NOMINAL FREQUENCY:            | 32.768 KHz           |
| FREQUENCY TOLERANCE AT 25°C:  | ±30 PPM MAX          |
| OPERATING TEMPERATURE RANGE:  | -10°C TO +60°C       |
| STORAGE TEMPERATURE RANGE:    | -40°C TO +85°C       |
| AGING:                        | ±3 PPM PER YEAR MAX  |
| LOAD CAPACITANCE:             | 12.5 pF              |
| DRIVE LEVEL:                  | 1.0 μw MAX           |
| SHUNT CAPACITANCE:            | 1.05 pF TYP          |
| EQUIVALENT SERIES RESISTANCE: | 50K OHM TYP          |
| TURNOVER TEMPERATURE:         | +25°C ±5°C           |
| PARABOLIC CURVATURE CONSTANT: | -0.04 PPM / Δ°C² TYP |
| MOTIONAL CAPACITANCE:         | 2.5 fF TYP           |
| CAPACITANCE RATIO:            | 400 TYP              |
| Q FACTOR:                     | 8000 TYP             |
| INSULATION RESISTANCE:        | 500 MOHM MIN         |



CAGE CODE:  
**ØVUEØ**

**RALTRON**  
10400 NW 33<sup>rd</sup> STREET  
MIAMI, FL 33172

ALL DIMENSIONS ARE IN mm/inch  
UNLESS OTHERWISE SPECIFIED

DRAWN BY: RG  
CHECKED BY: GC  
APPROVED BY: FP  
SCALE: SHEET 1 OF DATE: 12/08/11

DRAWING TITLE:  
**TUNING FORK CRYSTAL UNIT**

DRAWING NUMBER:  
**R145-32.768-12.5-SMD**