

**TUNING FORK CRYSTAL IN SMD 3.2x1.5mm CERAMIC SEAM SEAL PACKAGE.**
**PRODUCT FEATURES**

- Small dimensions 3.2x1.5x0.8mm with 2 solder pads.
- Highly reliable vacuum seam sealed ceramic package.
- Tight tolerances available.
- RoHS compliant, LEAD-FREE and HALOGEN-FREE.

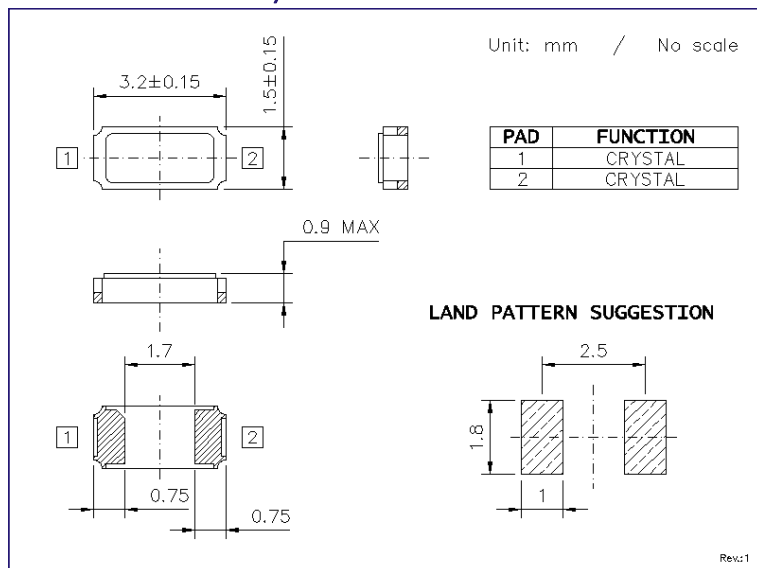
**APPLICATIONS**

- Mobil communication
- Handheld equipment

**PRODUCT PHOTO (NOT IN SCALE)**

**PRODUCT SPECIFICATIONS**

| PARAMETER                    | FC31M                          | CONDITIONS / REMARKS     |
|------------------------------|--------------------------------|--------------------------|
| Nominal frequency range      | 32.768kHz                      |                          |
| Crystal mode                 | Fundamental                    |                          |
| Frequency tolerance          | ±20ppm / ±30ppm / ±50ppm       | Other options available. |
| Stability over temperature   | -0.03±0.01ppm/Δ°C <sup>2</sup> | Parabolic coefficient.   |
| Operating temperature range  | -40 to +85°C                   | Other options available. |
| Turning point temperature    | 25±5°C                         |                          |
| Equivalent series resistance | <70kΩ                          |                          |
| Shunt capacitance (TYP)      | 1.5pF                          |                          |
| Motional capacitance (TYP)   | 3.3fF                          |                          |
| Load capacitance             | 6pF / 9pF / 12.5pF             | Please specify.          |
| Drive level                  | 0.2μW TYP / 1.0μW MAX          |                          |
| Aging per year               | ±3ppm                          | At +25°C                 |
| Storage temperature range    | -55 to +125°C                  |                          |

**PACKAGE OUTLINE / DIMENSIONS**

**PACKAGING INFORMATION**

- Tape & Reel compliant to EIA-481.
- Embossed carrier width 12mm.
- Component pitch in carrier 4mm.
- Reel diameter 180mm.
- QTY per reel: 3,000pcs MAX.

**RECOMMENDED REFLOW PROFILE**
