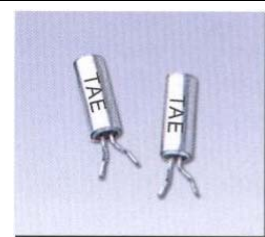


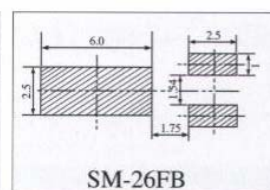
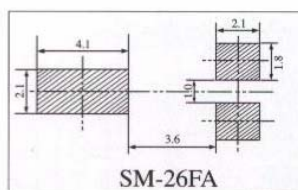
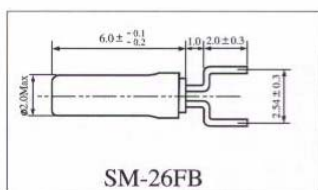
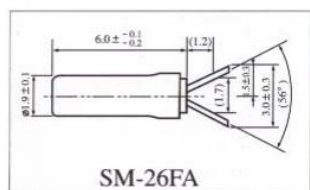
SMD Type Tuning Fork Crystal Resonators

● APPLICATIONS:

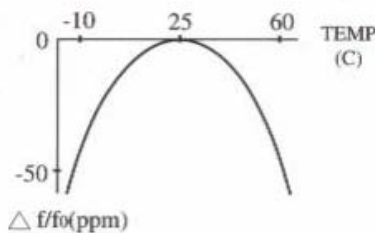
- ▲ Because of their excellent shock resistance and low power consumption, The units are ideal for portable equipment.
- ▲ Features superior characteristics to tuning fork-type quartz crystal units.
- ▲ Ideal for low cost SMD applications
- ▲ Provided in Tape and Reel



Dimensions:(mm)



FREQUENCY VS TEMPERATURE CURVE



Electronic specifications

| Partameter | Symb | Units | Typical | Min | Max | Condition |
|--|------------------|--|--------------|----------------|-----------|-------------|
| Nominal frequency | fo | KHZ | 32.768 | 25 | 200 | |
| Frequency tolerance | $\Delta f/fo$ | Ppm | ± 20 | ± 5 | ± 100 | At 25°C |
| Frequency vs.temperature characteristics | $\Delta f/fo$ | | See drawing | | | -10°C~+60°C |
| Turnover temperature | Tm | °C | 25±5 | | | |
| Temperature coefficient | β | ppm/(°C) ² | -0.034±0.006 | | | |
| Operating temperature range | T _{OPR} | °C | -10~+60 | | | |
| Storage temperature range | T _{STG} | °C | -40~+85 | | | |
| Equivalent series resistance | R ₁ | K Ω | 35 | 20 | 40 | |
| Load capacitance | C _L | PF | 12.5 | Please specify | | |
| Motional capacitance | C ₁ | PF | 0.0030TYP | | | |
| Shunt capacitance | Co | PF | 1.35TYP | | | |
| Capacitance ratio | γ | | 450TYP | | | |
| Drive level | DL | μ W | | | 1 | |
| Insulation resistance | IR | M Ω | | 500 | | |
| Aging(first year) | $\Delta f/fo$ | ppm | | ± 5.0 | | At25°C±3°C |
| Sealing | | 1×10 ⁻² μ Pa · m ³ /s MAX. | | | | |
| Shock resistance | | ± 5 ppm MAX, Drop test of 3 times on a hard board from 75cm height or shock test or 3000G×0.3ms×1/2 sin wave×3 directions | | | | |