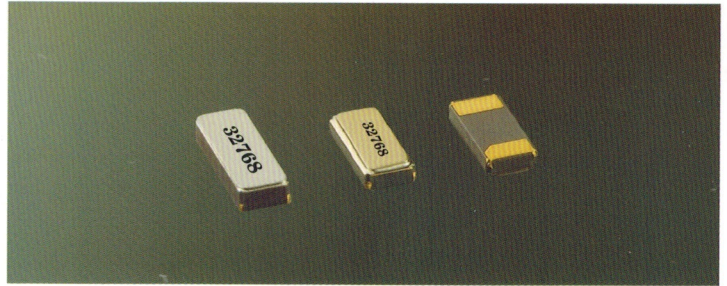


TUNING FORK SMD (S3215, S4115)

Features

High Stability
Small Size and Low Profile
Excellent Reliability and Aging



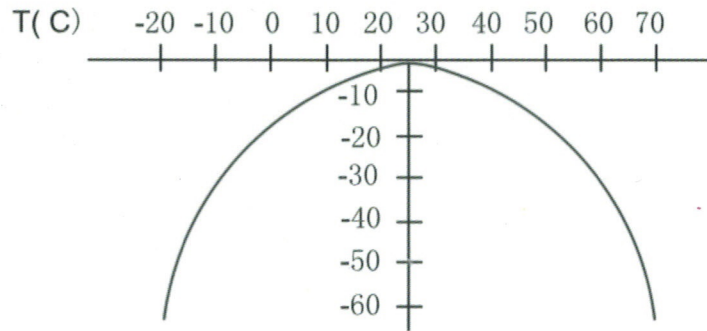
Specifications

	Type	S3215 / S4115
频率范围 Frequency Range(KHz)	Tuning fork	32.768KHz
调整频差 (ppm)	Frequency Tolerance (at 25°C)	±20 ~ ±50ppm
温度特性	Temperature Characteristics	
拐点温度 (°C)	Turnover Temperature	25°C ±5°C
二次温度系数	Parabolic Curvature constant	-0.035±0.008 ppm/°C ²
工作温度 (°C)	Operating Temperature	-40°C ~ +85°C
储存温度 (°C)	Storage Temperature Range	-55°C ~ +125°C
等效电阻 (Ω)	Equivalent Series Resistance	80K Ω MAX
静态电容 (pF)	Shunt Capacitance	2.0 pF Max
负载电容 (pF)	Load Capacitance	12.5pF (Standard) / 9.0pF
绝缘电阻 (MΩ)	Insulation Resistance	≥500MΩ//DC100V ± 10V
激励功率 (mW)	Drive Level	1.0 μ W Max
老化率 (ppm/y)	Aging	±3ppm/year

Options Available

Options Available	Item
V	Reel packing/ ammo packing
V	Different reel size options available
V	Special Frequency Tolerance requirement
V	Special ESR

■ Parabolic Temperature Curve



To determine frequency stability, use parabolic curvature
 For example: What is the stability at 45°C

- 1) Change in T(°C) = 45 - 25 = 20°C
- 2) Change in frequency = $-0.04 \text{ PPM} \times (\Delta T)^2$
 $= -0.04 \text{ PPM} \times (20)^2$
 $= -16.0 \text{ PPM}$

■ Dimension (Unit: mm)

