

SC-16S

1610-Size 32 kHz Small-Size Tuning Fork
Crystal Resonator

•Features

- 32kHz tuning fork crystal, compact size 1.6 x 1.0 x 0.5 mm
- SMD type suitable for high-density mounting
- Excellent shock and heat resistance.
- Complies with EU RoHS directive (completely Pb-free)
- Built-in highly reliable photolithographic crystal Resonator

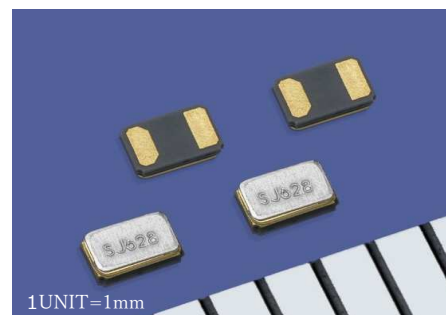
•Applications

- Smart ring
- GPS module
- Smartwatch
- Smart hearing aid
- Various microcontroller sub-clocks
- Reference clock for RTC
- Various communication modules

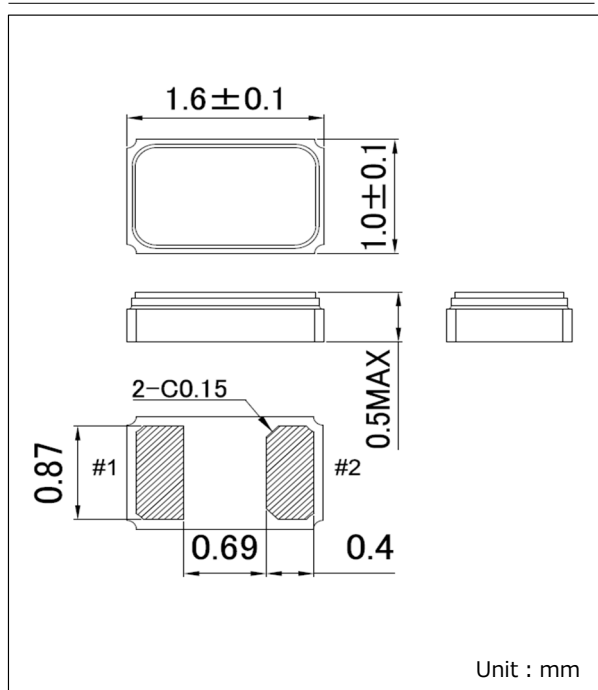
•Specifications

Conditions where not specified (Temperature: 25±2°C, DL;0.1μW)

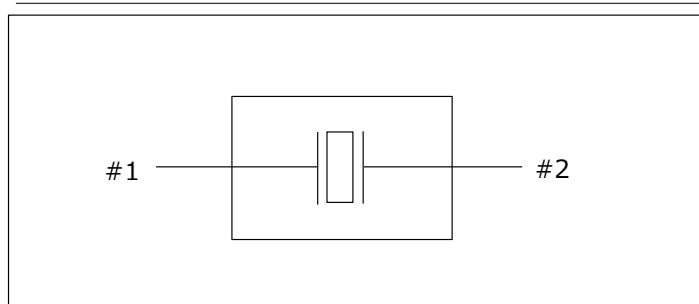
Item	Symbol	Specifications	Conditions / Note
Nominal Frequency	f_nom	32.768kHz	
Frequency Tolerance	f_tol	±20×10 ⁻⁶	
Turnover Temperature	Ti	25±5°C	
Parabolic Coefficient	β	(-0.036±10%)×10 ⁻⁶ /°C ²	
Load Capacitance	CL	4pF, 6pF, 7pF, 9pF, 12.5pF	For other CLs, please contact us.
Motional Resistance (ESR)	R1	90kΩ Max.	
Absolute Max. Drive Level	DLmax.	0.5μW Max.	
Drive Level	DL	0.1μW Typ.	
Shunt Capacitance	C0	1.2pF Typ.	Reference value
Frequency Ageing	f_age	±3×10 ⁻⁶ /year	First year
Operating Temperature	T_use	-40~+85°C	
Storage Temperature	T_stg	-55~+125°C	Store individually



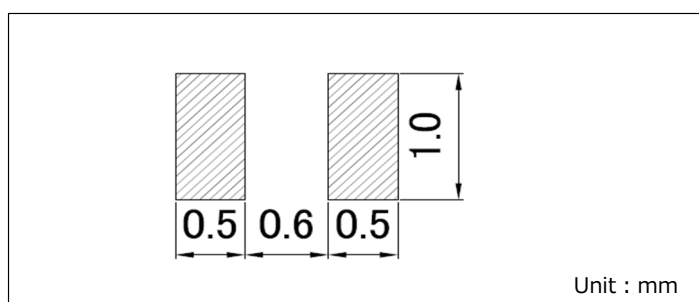
•Dimensions



•Internal Lead Connections



•Recommended Soldering Pattern



Remark: When designing the circuit board, do not place circuit patterns on the crystal resonator mounting area (bottom surface).

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