

SC-10S

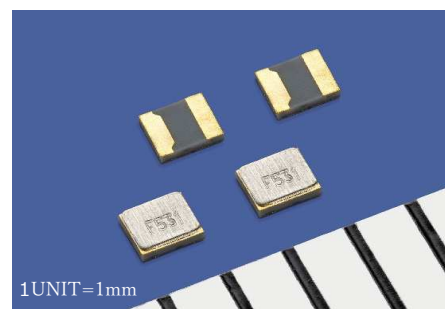
1008-Size 32 kHz World's Smallest Class Tuning Fork Crystal Resonator

•Features

- World's smallest 32kHz crystal, measuring 1.0x0.8x0.32 mm
- Space-saving design improves flexibility in circuit board layout
- Excellent shock and heat resistance.
- Complies with EU RoHS Directive (completely lead-free)
- Ideal for small devices such as smart rings and medical wearables

•Applications

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

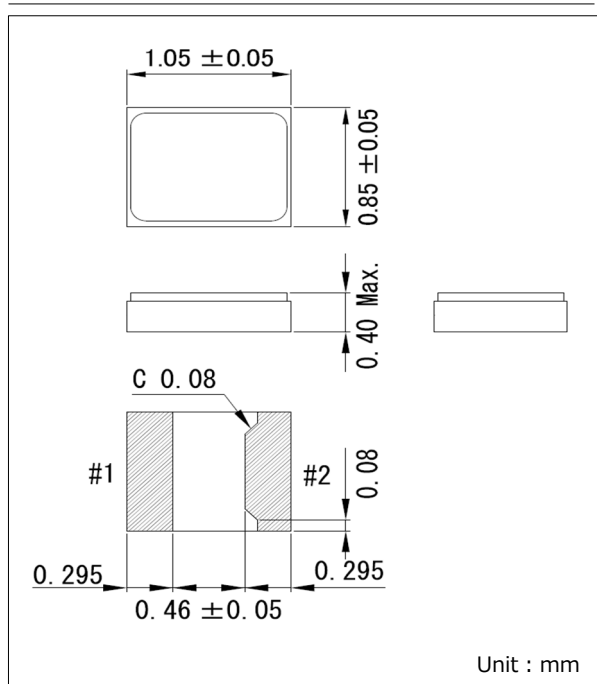


•Specifications

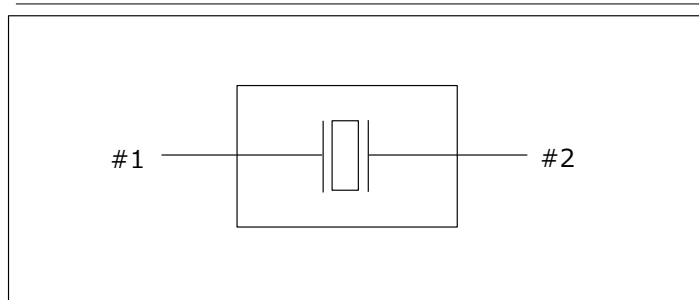
Conditions where not specified (Temperature: 25±2°C, DL;0.1μW)

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.	0.3μW Max.	
Drive Level	DL	0.1μW Typ.	
Shunt Capacitance	C0	1.1pF Typ.	Reference value
Frequency Ageing	f_age	±5×10 ⁻⁶ /year	First year
Operating Temperature	T_use	-40~+85°C	
Storage Temperature	T_stg	-55~+125°C	Store individually

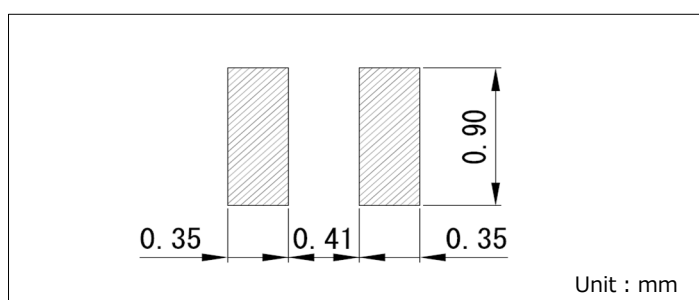
•Dimensions



•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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