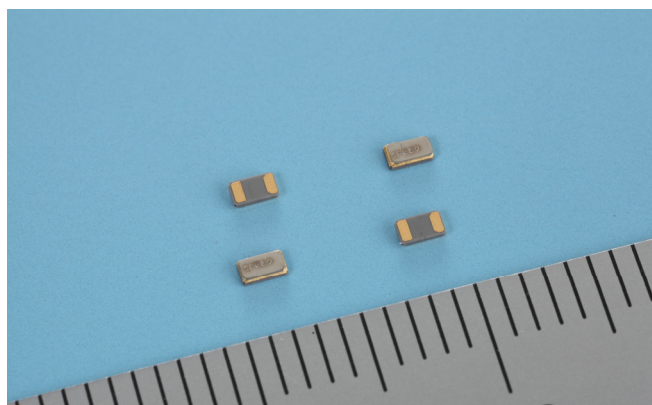


SC-20S



Features

- Ultra thin type (0.6mm)
- Suitable for high density surface mounting
- Excellent shock and heat resistance
- Complete Pb-free
- A crystal resonator processed by high reliable photolithographic technology inside.

Applications

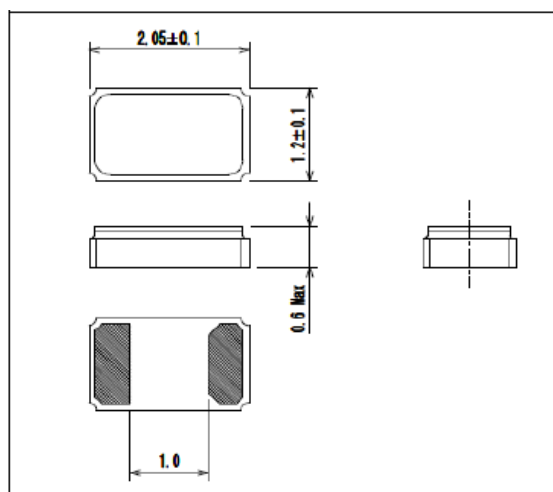
Cellular Phones, PHS, Tablet PC, DSC, Car Audio
GPS Module, FM Tuner Module, Mobile Device
Sub-clock function for a variety of Micro-
Controllers

Standard Specifications

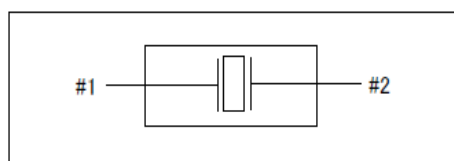
Conditions where not specified (Temperature: 25±2°C, DL:0.1μW)

Item	Symbol	Specifications	Conditions Note
Nominal Frequency	f _{nom}	32.768kHz	
Frequency Tolerance	f _{tol}	±20×10 ⁻⁶	
Turnover Temperature	T _i	+25±5°C	
Parabolic Coefficient	B	(-3.0±1.0)×10 ⁻⁸ /°C ²	
Load Capacitance	CL	(7pF,) 9pF, 12.5pF	
Motional Resistance (ESR)	R ₁	90kΩ Max.	
Absolute Max. Drive Level	DL _{max}	0.5μW Max.	
Drive Level	DL	0.1μW typ.	
Shunt Capacitance	C ₀	1.3pF typ.	
Frequency Ageing	f _{age}	±3×10 ⁻⁶ /year	+25±3°C, First Year
Operating Temperature	T _{use}	-40~+85°C	
Storage Temperature	T _{stg}	-55~+125°C	Piece part basis

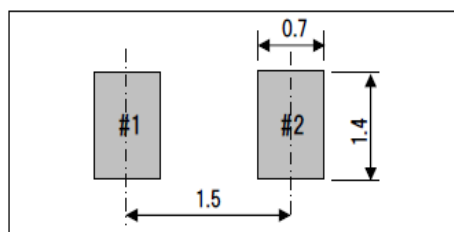
Dimensions



Internal Lead Connections



Recommended Soldering Pattern



Remark: Please make sure that there is no pattern under SC-20S on the circuit board.

Seiko Instruments Inc.

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