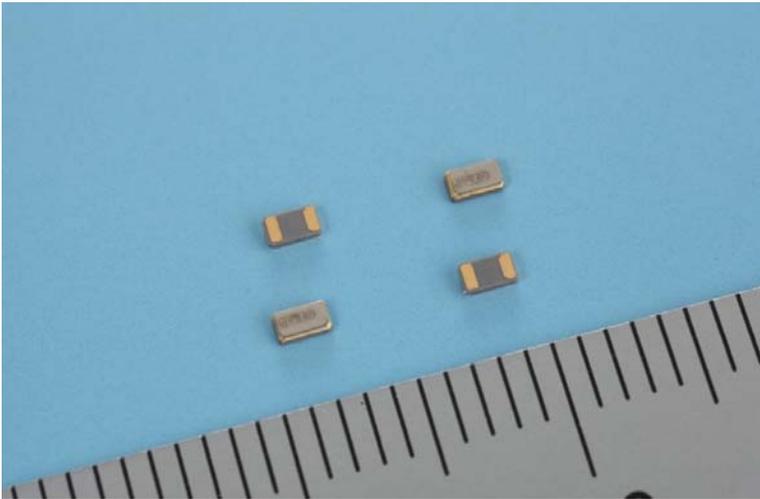


SC-20A (Automotive)



Features

- Conforming to "AEC-Q200"
- Ultra thin type (0.6mm)
- Suitable for high density surface mounting
- Excellent shock and heat resistance
- Complete Pb-free
- Crystal resonator processed by high reliable photolithographic technology inside.

Applications

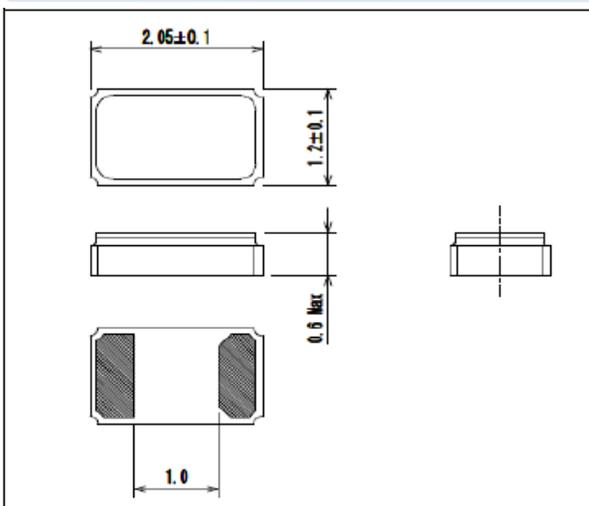
Car Audio, Car Navigation,
ECU sub clock, In-vehicle clock

Standard Specifications

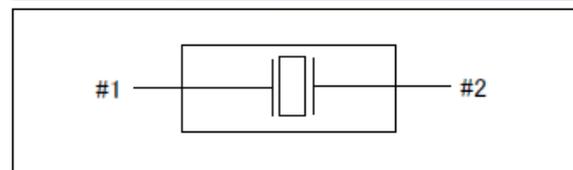
(Temperature: 25±2°C, DL;0.1μW)

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	B	(-0.028±20%)×10 ⁻⁶ /°C ²	
Load Capacitance	CL	6pF, 7pF, 9pF, 12.5pF	
Motional Resistance (ESR)	R1	90kΩ Max.	
Absolute Max. Drive Level	DLmax.	1.0μW Max.	
Drive Level	DL	0.1μW typ.	
Shunt Capacitance	C0	1.3pF typ.	
Frequency Ageing	f_age	±3×10 ⁻⁶ /year	+25±3°C, First Year
Operating Temperature	T_use	-55~+125°C	
Storage Temperature	T_stg	-55~+125°C	Piece part basis

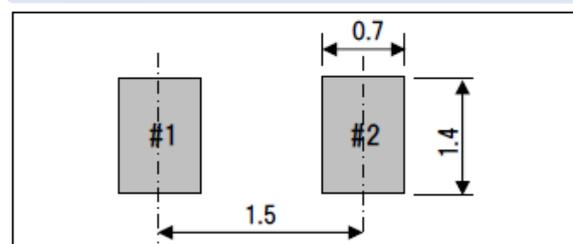
Dimensions



Internal Lead Connections



Recommended Soldering Pattern



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