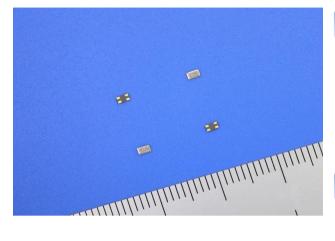


# SC-20T t=0.33mm



## **FEATURES**

- ·Ultra thin type with height 0.33mm max.
- •SMD type suitable for high density surface mounting.
- ·Excellent shock and heat resistance.
- ·Complete Pb-free.
- ·Complies with EU RoHS directive.
- •A crystal resonator processed by high reliable photo-lithographic technology inside.

## **APPLICATIONS**

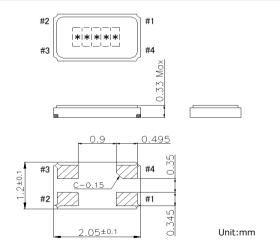
Smart card, Wearable, Module, Sub-clock function for a variety of Microcomputer, etc.

# STANDARD SPECIFICATIONS

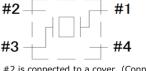
Conditions where not specified (Temperature: 25±2℃, DL;0.1µW)

		Contactions where not specified (remperature 25-2 e/ 52/611411)	
Item	Symbol	Specifications	Conditions Note
Nominal Frequency	f_nom	32.768kHz	
Frequency Tolerance	f_tol	±20×10 <sup>-6</sup>	※Please contact us for other deviations.
Turnover Temperature	Ti	+25±5℃	
Parabolic Coefficient	β	(-0.033±10%)×10 <sup>-6</sup> /℃ <sup>2</sup>	
Load Capacitance	$C_L$	6.0pF、7.0pF、9.0pF、12.5pF	※Please contact us for other CL values.
Motional Resistance (ESR)	$R_1$	80kΩ max.	
Absolute Maximum Drive Lev	DLmax.	1.0μW max.	
Level of Drive	DL	0.1μW typ.	
Shunt Capacitance	$C_0$	0.8pF typ.	
Frequency Ageing	f_age	±3×10 <sup>-6</sup>	+25±3℃, First Year
Operating Temperature	T_use	-40∼+85℃	
Storage Temperature	T_stg	-55∼+125℃	Piece part basis

### **DIMENSIONS**



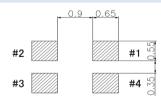
#### INTERNAL LEAD CONNECTIONS



#2 is connected to a cover. (Connect to GND)

Do not connect. #4 to any parts

#### RECOMMENDED SOLDERING PATTERN



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

### Seiko Instruments Inc.

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