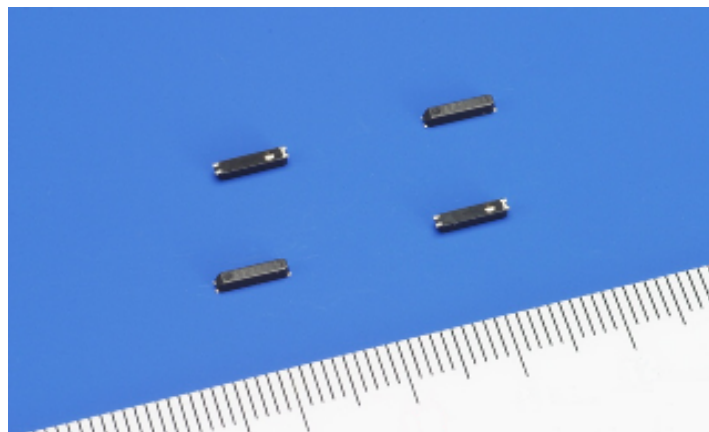


SSP-T7-FL (SMD type low CL ewsonator for low-power microcontrollers)



Features

- Consumes one tenth the standby power of general crystal resonators (with a load capacitance of 12.5pF)
- Excellent low drive level characteristics
- Complies with EU RoHS directive
- Halogen free

Applications

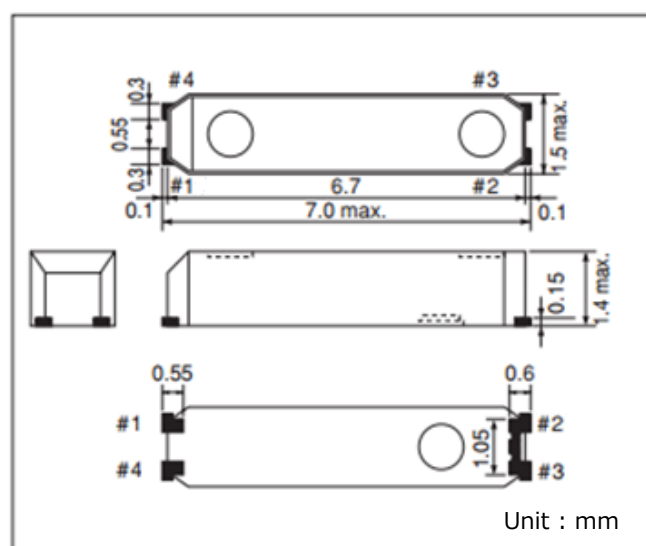
- Consumer-electronics products for saving standby energy consumption
- Battery operated devices requiring a long battery life

(Temperature: 25±2°C, DL;0.1μW)

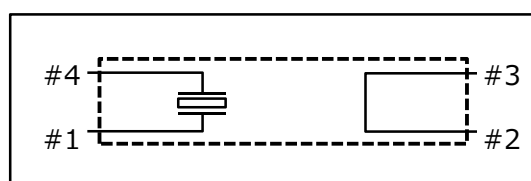
Standard Specifications

Item	Symbol	Specifications	Conditions Note
Nominal Frequency	f _{nom}	32.768kHz	
Frequency Tolerance	f _{tol}	±20×10 ⁻⁶	Please specify
Turnover Temperature	T _i	+25±5°C	
Parabolic Coefficient	B	(-0.033±10%)×10 ⁻⁶ /°C ²	
Load Capacitance	CL	3.7pF,4.4pF,6.0pF	
Motional Resistance (ESR)	R ₁	65kΩ max.	
Absolute Max. Drive Level	DL _{max.}	1.0μW max.	
Drive Level	DL	0.01μW typ.	
Shunt Capacitance	C ₀	0.9pF typ.	
Frequency Ageing	f _{age}	±3×10 ⁻⁶	+25±3°C, First Year
Operating Temperature	T _{use}	-40~+85°C	
Storage Temperature	T _{stg}	-55~+125°C	Piece part basis

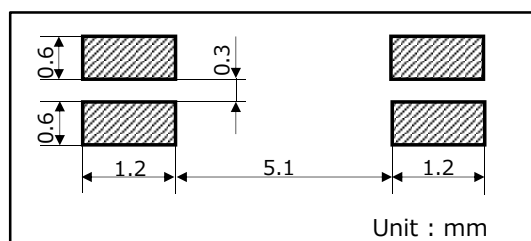
Dimensions



Internal Lead Connections



Recommended Soldering Pattern



CAUTION

The SSP-T7-FL is designed for use in ultra-low-power microcontrollers. Do not use this resonator in regular microcontrollers as it might cause problems with oscillation.

Seiko Instruments Inc.

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