

VT-200-FL

Ø2.0 mm Cylinder-type 32 kHz Tuning Fork Crystal Resonator
Low CL Crystal Resonator for Low-Power MCUs

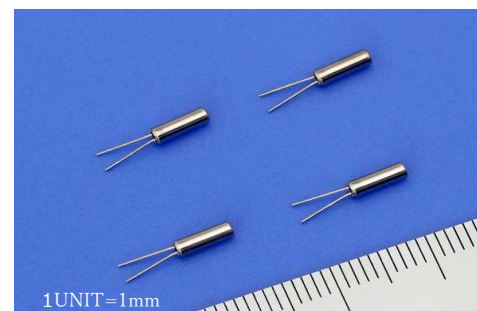
•Features

- 1/10 Standby Power Consumption Compared with Standard 12.5 pF Crystal Resonators*1
- Excellent Shock Resistance and Heat Resistance
- Compliant with EU RoHS Directive / Halogen-Free
- Incorporates a Highly Reliable Photolithographically Processed Quartz Crystal Resonator

*1 When used with a low-load-capacitance MCU.

•Applications

- Smart Meters
- Sub Clock for MC
- Reference Clock for RTCs
- Industrial Equipment
- Security Cameras
- Electronic Shelf Labels (ESL)
- Home Appliances

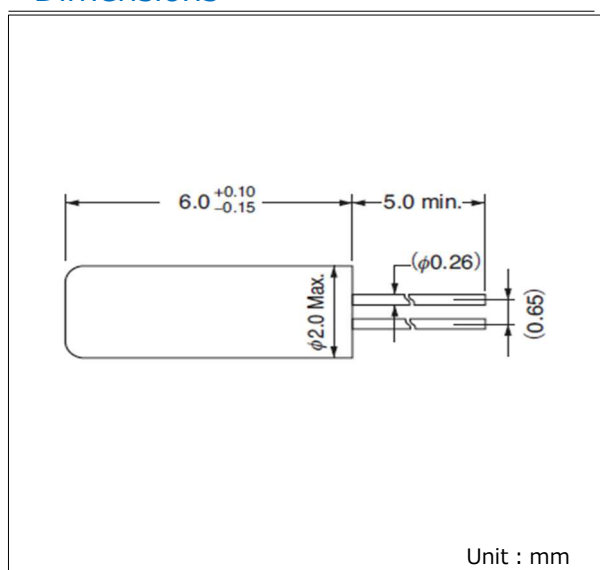


•Specifications

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	Other tolerance values are available upon request.
Turnover Temperature	Ti	25±5°C	
Parabolic Coefficient	β	(-0.035±10%) × 10 ⁻⁶ /°C ²	
Load Capacitance	CL	3.7p , 4.4pF ,6.0pF	For other CLs, please contact us.
Motional Resistance (ESR)	R1	50kΩ Max.	
Absolute Max. Drive Level	DLmax.	1.0μW Max.	
Drive Level	DL	0.1μW Typ.	
Shunt Capacitance	C0	0.9pF Typ.	Reference value
Frequency Ageing	f_age	±3×10 ⁻⁶ /year	First year
Operating Temperature	T_use	-40~+85°C	
Storage Temperature	T_stg	-40~+85°C	Store individually

•Dimensions



Remark: When designing the circuit board, do not place circuit patterns on the crystal resonator mounting area (bottom surface).

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