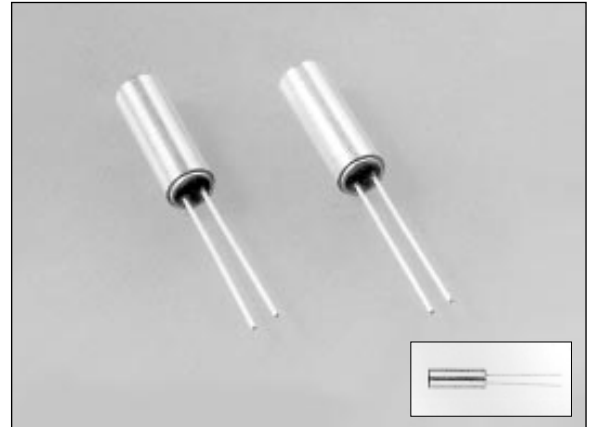


TEMPERATURE SENSING CRYSTAL

HTS-206

- Crystal used to sense the change in temperature.
- 2mm in diameter and 6mm in length.
- Good linearity frequency and temperature.
- Low frequency (40KHz) enables low current consumption.
- Wide temperature range (-40 to +85°C).
- Suitable for DTCXO and temperature equipment.



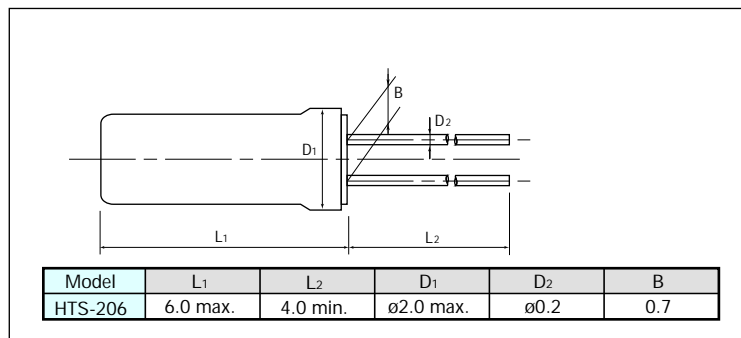
Actual size

Specifications (characteristics)

Item	Symbol	Specifications	Remarks
Nominal frequency	f_0	40kHz	
Temperature range	Storage temperature	T_{STG}	-55°C to +125°C
	Operating temperature	T_{OPR}	-40°C to +85°C
Drive level	Maximum	GL	1.0 μ W max.
	Recommended	DL	0.1 μ W typ.
Frequency tolerance (standard)	$\Delta f/f$	$\pm 2\%$	$T_a = 25^\circ\text{C}$, $DL = 0.1\mu\text{W}$
Temperature coefficient	1st	α	$-29.6 \times 10^{-6}/^\circ\text{C}$ [$\pm 2\%$]
	2nd	β	$-6.4 \times 10^{-8}/^\circ\text{C}^2$ [$\pm 8\%$]
	3rd	γ	$-1.5 \times 10^{-10}/^\circ\text{C}^3$ max.
Series resistance	R_1	30 K Ω max.	$T_a = 25^\circ\text{C}$, $DL = 1.0\mu\text{W}$
Motion capacitance	C_1	2.0 fF typ.	
Shunt capacitance	C_0	0.9 pF typ.	
Insulation resistance	IR	500 M Ω min.	
Aging	f_a	$\pm 3\text{ppm/year}$ max.	$T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$
Shock resistance	S.R.	$\pm 3\text{ppm}$ max.	Three drops on a hard board from 50 cm

External dimensions

(Unit: mm)



Temperature characteristic

