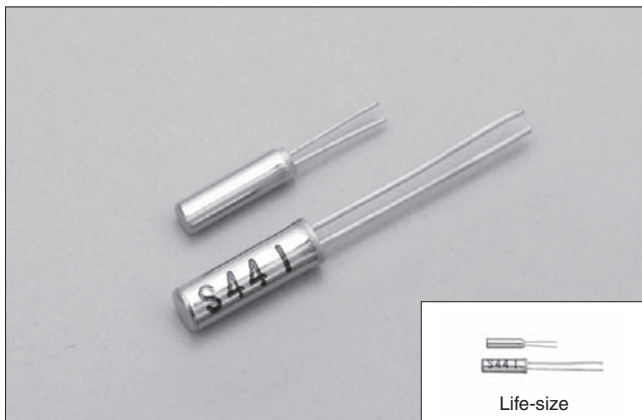


# TUNING FORK CRYSTAL UNITS (Cylinder Type)

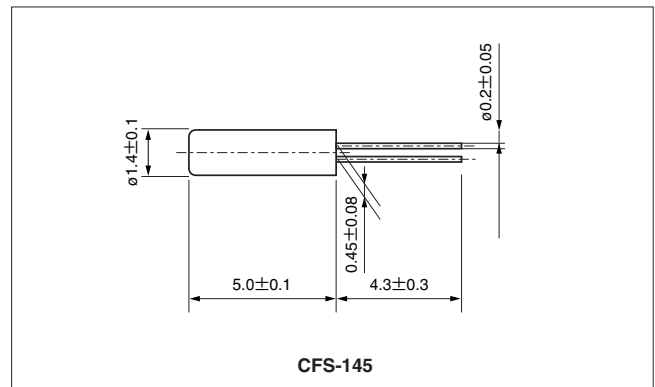
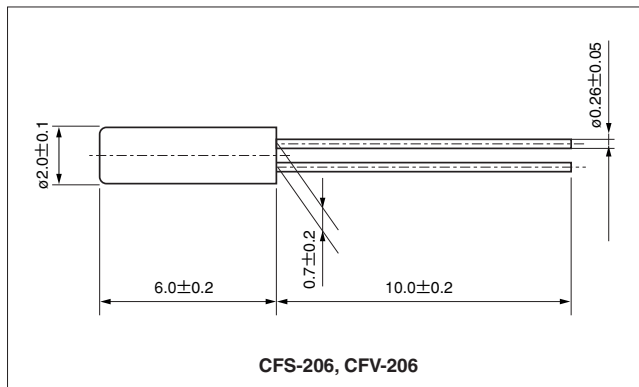
## CFS-206·CFS-145·CFV-206



### FEATURES

- Best suited for portable devices with low current consumption.
- For a clock source in digital equipment.

### DIMENSION [mm]



### STANDARD SPECIFICATIONS

Item	Model	CFS-206	CFS-145	CFV-206	Conditions
Nominal Frequency	$f_0$	32.768kHz		30kHz~100kHz	Need to contact us for the available frequency in CFV-206
Frequency Tolerance	$\Delta f/f_0$	$\pm 20\text{ppm}$		$\pm 30\text{ppm}$	at 25°C
Load capacitance	$C_L$	12.5pF	8.0pF	12.5pF	Need to specify your requirement
Operating Temperature Range	$T_{OPR}$	-20°C ~ +70°C			
Storage Temperature Range	$T_{STR}$	-40°C ~ +85°C			
Turnover Temperature	$T_M$	25°C $\pm 5^\circ\text{C}$			See figure 2 in P4
Temperature Coefficient	$\beta$	-0.034 $\pm 0.006\text{ppm}/^\circ\text{C}^2$			
Motional (series) resistance	$R_1$	35K $\Omega$ Max.	40K $\Omega$ Max.	50K $\Omega$ Max.	at 25°C
Level of drive	$D_L$	1 $\mu\text{W}$ Max.			
Aging (first year)	$\Delta f/f_0$	$\pm 3\text{ppm}$ Max.		$\pm 5\text{ppm}$ Max.	25°C $\pm 3^\circ\text{C}$
Quality Factor	$Q$	70000 Typ.	85000 Typ.	70000~100000 Typ.	Depend on frequency
Shunt capacitance	$C_0$	1.35pF Typ.	1.00pF Typ.	0.8~1.7pF Typ.	Depend on frequency