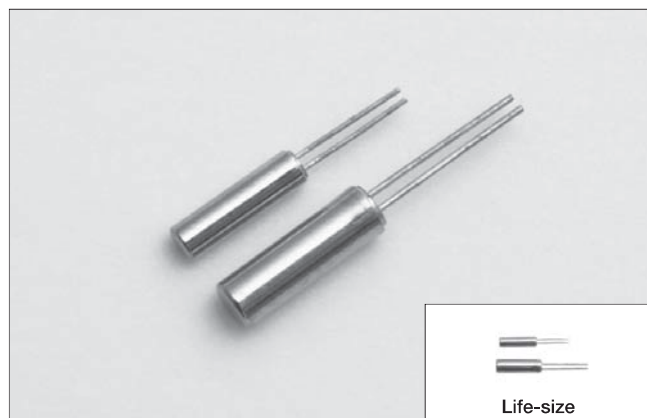


TUNING FORK CRYSTAL UNITS (Cylinder Type)

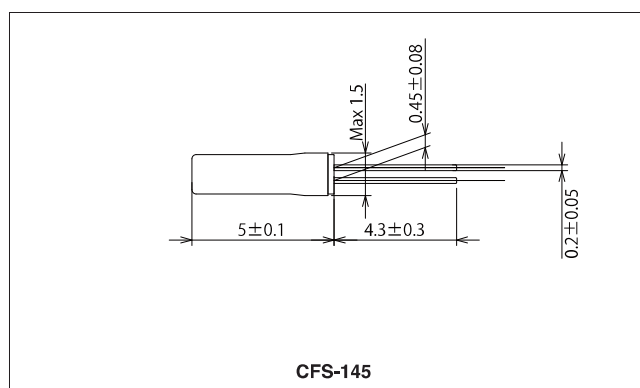
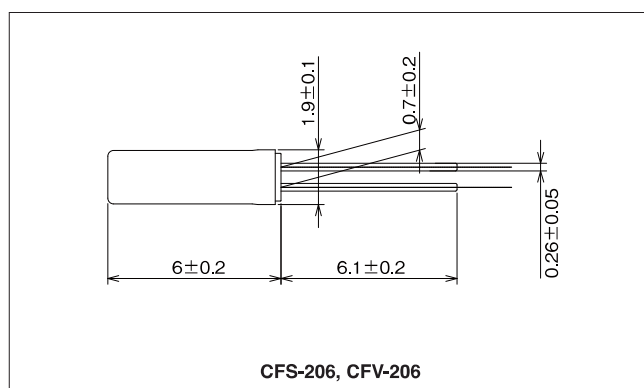
RoHS compliant / Pb free **CFS-206·CFS-145·CFV-206**



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}	$-20^\circ\text{C} \sim +70^\circ\text{C}$			
Storage Temperature Range	T_{STR}	$-40^\circ\text{C} \sim +85^\circ\text{C}$			
Turnover Temperature	T_M	$25^\circ\text{C} \pm 5^\circ\text{C}$			
Temperature Coefficient	β	$-0.034 \pm 0.006\text{ppm}/^\circ\text{C}^2$			
Motional (series) resistance	R_1	35K Ω Max.	40K Ω Max.	50K Ω Max.	at 25°C
Level of drive	D_L	1 μW Max.			
Aging (first year)	$\Delta f/f_0$	$\pm 3\text{ppm}$ Max.		$\pm 5\text{ppm}$ Max.	$25^\circ\text{C} \pm 3^\circ\text{C}$
Shunt capacitance	C_0	1.2pF Typ.	1.00pF Typ.	0.8~1.7pF Typ.	Depend on frequency

• Example Part Number

CM315D

Model

CFS-206
CFS-145
CFY-206
CMR200T
CMJ206T
CM200C
CM250C
CM519
CM415
CM315D
CM130

32 768

Frequency

Please mention numeral of the frequency in Hz unit.

D Z F T

Frequency deviation (at 25°C)

Standard specification shall differ subject to frequency.

A +/-30ppm (STD)
B +/-50ppm
C +/-100ppm
D +/-20ppm (STD) 32.768KHz
E +/-10ppm
F +/-15ppm
G +/-25ppm
H +/-5ppm
Z others

— XXX

CTZ management code

It is a number to be assigned by CTZ after inquiry from a customer.

Package specification

T Tape and Reel (Standard package unit)
B Bulk (Without taping/ Bulk Package)

Load capacitance (CL)

A Series	G 13.0pF
B 6.0pF	Q 10.0pF
C 9.0pF (STD)	S 11.0pF
D 9.5pF	V 8.0pF
E 12.0pF	Y 7.0pF
F 12.5pF (STD)	Z others

Frequency-temperature characteristic (at operating temperature range)

Z Standard spec only