

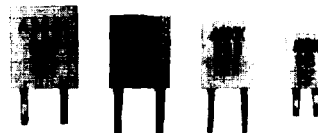
# Ceramic Resonators, Case Type Type K

(380 to 820 kHz)

EFO-A□□□K□□□

The case type ceramic resonator employs area vibration mode of piezoelectric ceramics (PCM<sub>A</sub>): it is constructed such that the piezoelectric element is press fitted and held between the electrode plates, the entire unit is protected with a case and the case opening is sealed with resin.

Since the oscillation frequency is determined according to the piezoelectric ceramics size, the product size differs depending on the oscillation frequency. The manufacturable frequency range for this type is 380 to 820kHz.



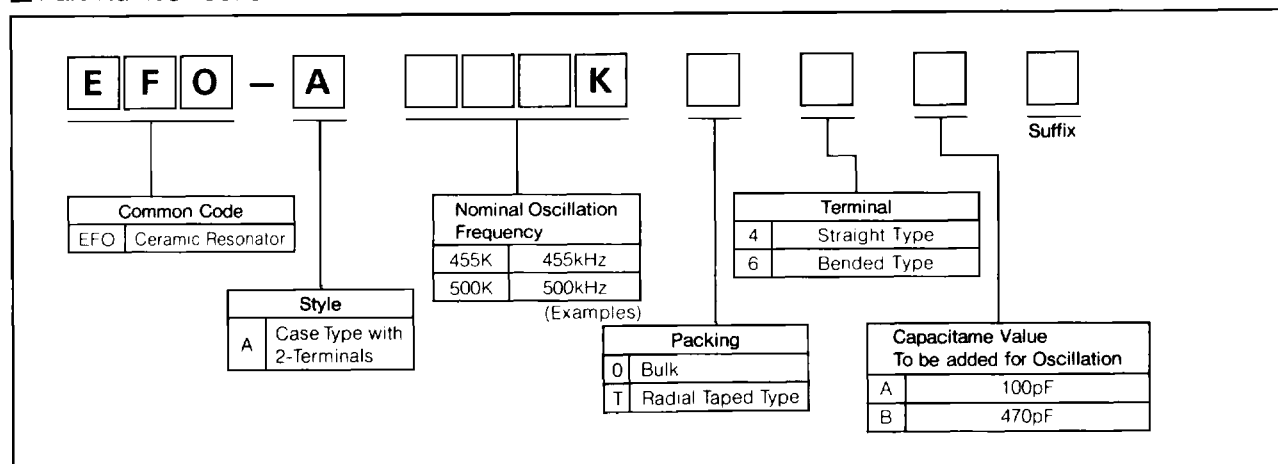
### Features

- Range of oscillation frequency: 380 to 820 kHz.
- Standard frequency tolerance:  $\pm 0.5\%$ .
- Stable performances against various environmental tests.
- Temperature stable: Max. oscillation frequency drift:  $\pm 0.3\%$ ,  $-20$  to  $80^\circ\text{C}$
- Solvent cleaning method is applicable.

### Applications

- Clock generation for various remotecontrol systems.
- Clock generation for micro-processors used in home appliances, such as washing machines, electric ovens etc.

### Part Number Code



# Ceramic Resonators (Case Type)

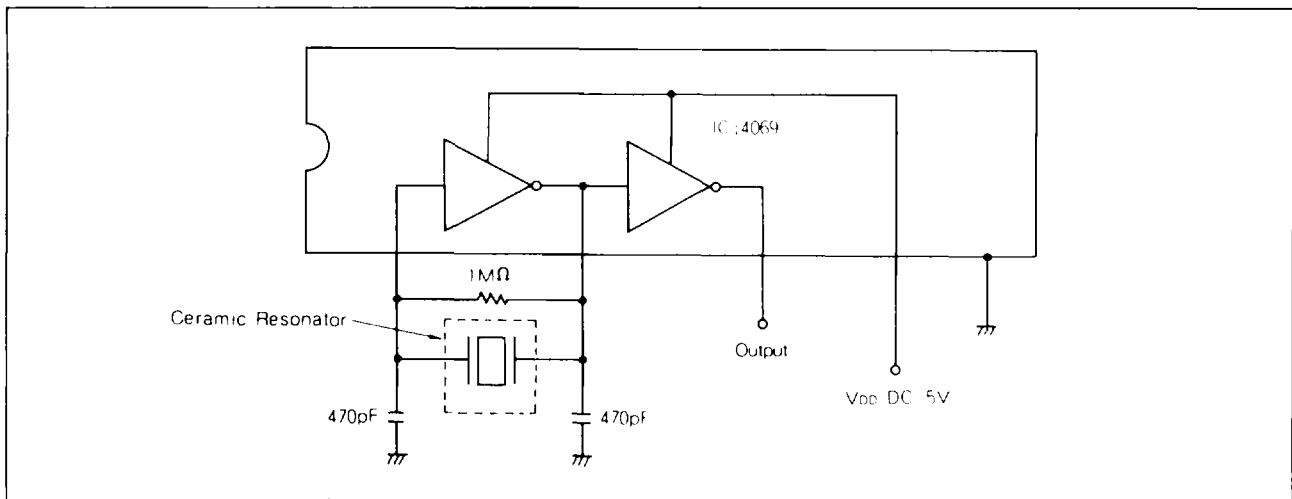
## Standard Products

Part Number	Item	Oscillation Frequency	Frequency Tolerance	Resonant Resistance
EFO-A400K04B		400kHz	±0.5%	20Ωmax.
EFO-A420K04B		420kHz		
EFO-A455K04B		455kHz		
EFO-A480K04B		480kHz		30Ωmax.
EFO-A500K04B		500kHz		50Ωmax.
EFO-A540K04B		540kHz		
EFO-A640K04B		640kHz		
EFO-A800K04B		800kHz		

- Operating Temperature Range: -20 to 80°C
- Temperature Characteristics: Max oscillation frequency drift is ±0.3% of the value at 25°C over the temperature range of -20 to 80°C

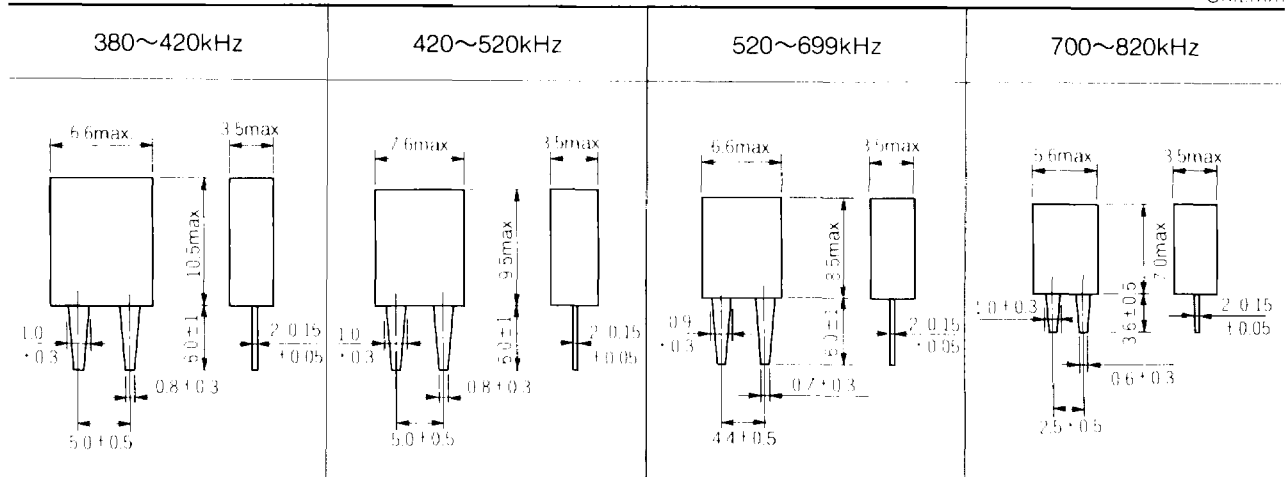
Notes: 1. Other types than above standard products are also available within the range of 380 to 820kHz, upon request.  
 2. The tolerance of oscillation frequency is our standard, however, non-standard types with other frequency tolerances can be produced, if required. Please contact us for more information.

## Standard Oscillation Circuit



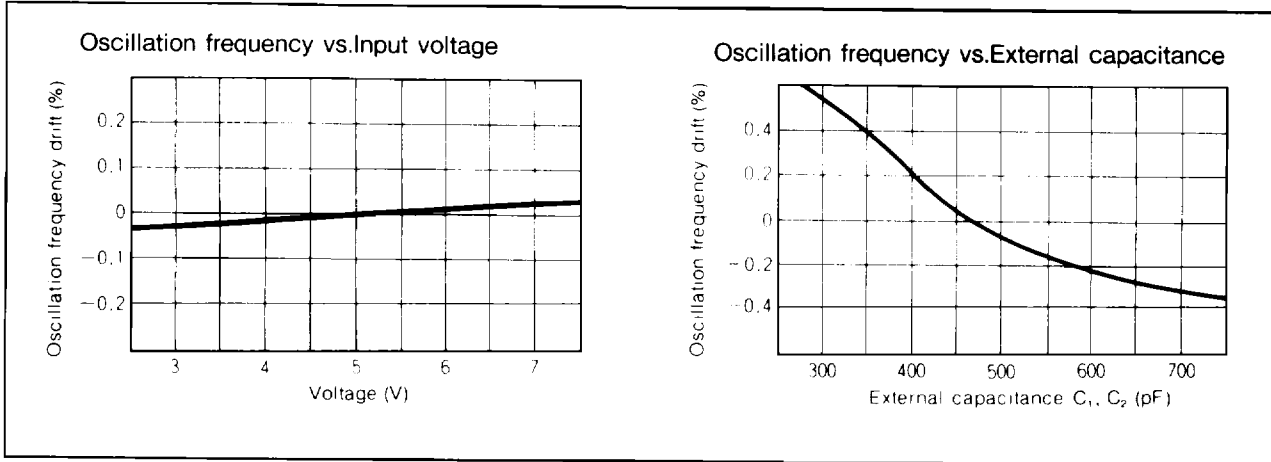
## Dimensions

Unit:mm



# Ceramic Resonators (Case Type)

## Stability (EFO-A455K04B)



## Typical Environmental Characteristics (EFO-A455K04B)

