## Ceramic Resonators (CERALOCK®)



### kHz Lead Type -Standard Frequency Tolerance for General Usage-

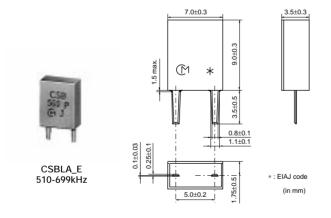
The CSBLA series ceramic resonators owe their development to MURATA's innovative expert technologies and the application of mass production techniques typically utilized in the manufacture of piezoelectric ceramic components. Because of their high mechanical Q and consistent high quality, the CSBLA series are ideally suited to microprocessor and remote control unit applications.

#### ■ Features

- 1. The series is stable over a wide temperature range and with respect to long-term aging.
- 2. The series comprises fixed, tuned, solid-state devices.
- 3. The resonators are miniature and lightweight.
- 4. They exhibit excellent shock resistance performance.
- 5. Oscillating circuits requiring no adjustment can be designed by utilizing these resonators in conjunction with transistors or appropriate ICs.

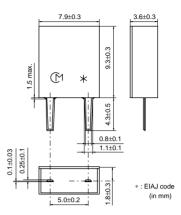
#### ■ Applications

- 1. Square-wave and sine-wave oscillators
- 2. Clock generator for microprocessors
- 3. Remote control systems



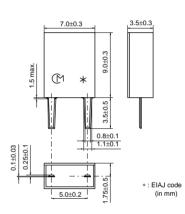


CSBLA E 375-429kHz



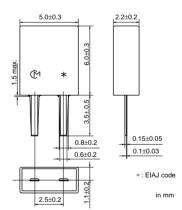


CSBLA F 430-509kHz





CSBLA\_J 700-1250kHz



Part Number	Oscillating Frequency (kHz)	Initial Tolerance	Temp. Stability (%)	Temperature Range (°C)
CSBLA_E	375 to 699	-	±0.3	-20 to +80
CSBLA J	700 to 1250	±0.5%	±0.3	-20 to 80

Irregular or stop oscillation may occur under unmatched circuit conditions. Please check the actual conditions prior to use

The order quantity should be an integral multiple of the "Minimum Quantity" shown in the packaging page

#### ■ Oscillation Frequency Measuring Circuit

# To Frequency counter **≷** Rd **-**|||

#### ■ Oscillation Frequency Temperature Stability

