



CERAMIC RESONATOR (CERALOCK®)

Chip Ceramic Resonator **CSAC/CSACS** Series (CERALOCK®)

Wide range of chip CERALOCK® is now available.

This diverse series owes its development to MURATA's package technology expertise and original mass production techniques. It enables high-density mounting and further miniaturization of electronic equipment.

■FEATURES

1. The series is available in a wide frequency range.
2. The resonators are extremely small and have a low profile (CSACS series).
3. No adjustment is necessary for oscillation circuits.

■APPLICATIONS

1. Clock oscillators for microprocessors.
2. Electronic control circuits for small electronic equipment.
3. Automotive electronics
4. DTMF generators for cordless telephones.

■SPECIFICATIONS

Type	CSAC Series		CSACS Series	
	CSAC□MGC/MGCM	CSACS□MT	CSACS□MX040	
Frequency Range	1.80–6.00MHz	6.01–13.0MHz	14.00–60.00MHz	
Oscillation Frequency Initial Tolerance	±0.5%	±0.5%	±0.5%	
Oscillation Frequency Temperature Stability※1	±0.3%	±0.5%	±0.3%	
Aging※2	±0.3%	±0.5%	±0.3%	
Oscillation Frequency Measuring Circuit				IC :1/6CD4069UBE×2※3 VDD :5V (MT Series:12V) X :Chip CERALOCK®

※1 At -20 to +80°C

※2 For 10 years at room temperature

※3 TC74HCU04 is used as the standard circuit for the MX040 series.

