

# Ceramic Resonators (CERALOCK®)

Ceramic resonators (CERALOCK®) are made of high stability piezoelectric ceramics that function as a mechanical resonator. At present, CERALOCK® find a broad range of applications such as automotive electronics, communications, personal computing, and medical/healthcare equipment.



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Part Number	Frequency	Frequency Tolerance	Frequency Shift by Temperature	Operating Temperature Range	Other Applications	Shape
CSTNE10M0G520000R0 <small>Under development</small>	10.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE10M0G52A000R0 <small>Under development</small>	10.000MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
CSTNE10M0G52Z000R0 <small>Under development</small>	10.000MHz	±0.50%	±0.20%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE10M0G550000R0 <small>In Production</small> <small>Recommended</small>	10.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE10M0G55A000R0 <small>In Production</small> <small>Recommended</small>	10.000MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
CSTNE10M0G55Z000R0 <small>In Production</small> <small>Recommended</small>	10.000MHz	±0.50%	±0.20%	-40°C to 125°C	Consumer/Industrial	SMD

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Part Number	Frequency	Frequency Tolerance	Frequency Shift by Temperature	Operating Temperature Range	Other Applications	Shape
CSTNE10M0GH5C000R0 <span>In Production</span> <span>Recommended</span>	10.000MHz	±0.07%	±0.13%	-40°C to 125°C	Automotive	SMD
CSTNE10M0GH5L000R0 <span>In Production</span> <span>Recommended</span>	10.000MHz	±0.07%	±0.11%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE11M0G520000R0 <span>Under development</span>	11.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE11M2G550000R0 <span>In Production</span> <span>Recommended</span>	11.289MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE12M0G520000R0 <span>Under development</span>	12.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE12M0G52A000R0 <span>Under development</span>	12.000MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
CSTNE12M0G52Z000R0 <span>Under development</span>	12.000MHz	±0.50%	±0.20%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE12M0G550000R0 <span>In Production</span> <span>Recommended</span>	12.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE12M0G55A000R0 <span>In Production</span> <span>Recommended</span>	12.000MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
CSTNE12M0G55Z000R0 <span>In Production</span> <span>Recommended</span>	12.000MHz	±0.50%	±0.20%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE12M0GH5C000R0 <span>In Production</span> <span>Recommended</span>	12.000MHz	±0.07%	±0.13%	-40°C to 125°C	Automotive	SMD
CSTNE12M0GH5L000R0 <span>In Production</span> <span>Recommended</span>	12.000MHz	±0.07%	±0.11%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE12M2G520000R0 <span>Under development</span>	12.288MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE12M2G550000R0 <span>In Production</span> <span>Recommended</span>	12.288MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE12M2G55A000R0 <span>In Production</span> <span>Recommended</span>	12.288MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD

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<span>In Production</span> <span>Recommended</span> CSTNE12M2GH5L000R0	12.288MHz	±0.07%	±0.11%	-40°C to 85°C	Consumer/Industrial	SMD
<span>Under development</span> CSTNE12M5G520000R0	12.500MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
<span>In Production</span> <span>Recommended</span> CSTNE12M5G550000R0	12.500MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
<span>In Production</span> <span>Recommended</span> CSTNE12M5G55A000R0	12.500MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
<span>In Production</span> <span>Recommended</span> CSTNE12M5G55Z000R0	12.500MHz	±0.50%	±0.20%	-40°C to 125°C	Consumer/Industrial	SMD
<span>Under development</span> CSTNE13M0G520000R0	13.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
<span>In Production</span> <span>Recommended</span> CSTNE13M0G55A000R0	13.000MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
<span>Under development</span> CSTNE13M5G520000R0	13.500MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
<span>In Production</span> <span>Recommended</span> CSTNE13M5G550000R0	13.500MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
<span>Under development</span> CSTNE14M0V510000R0	14.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
<span>In Production</span> <span>Recommended</span> CSTNE14M0V530000R0	14.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
<span>In Production</span> <span>Recommended</span> CSTNE14M0V53C000R0	14.000MHz	±0.50%	±0.15%	-40°C to 125°C	Automotive	SMD
<span>In Production</span> <span>Recommended</span> CSTNE14M3V530000R0	14.318MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
<span>Under development</span> CSTNE14M7V510000R0	14.746MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
<span>In Production</span> <span>Recommended</span> CSTNE14M7V530000R0	14.746MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD

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CSTNE14M7V53C000R0 <span>In Production</span> <span>Recommended</span>	14.746MHz	±0.50%	±0.15%	-40°C to 125°C	Automotive	SMD
CSTNE15M0V530000R0 <span>In Production</span> <span>Recommended</span>	15.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE15M0V53C000R0 <span>In Production</span> <span>Recommended</span>	15.000MHz	±0.50%	±0.15%	-40°C to 125°C	Automotive	SMD
CSTNE16M0V510000R0 <span>Under development</span>	16.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE16M0V51C000R0 <span>Under development</span>	16.000MHz	±0.50%	±0.30%	-40°C to 125°C	Automotive	SMD
CSTNE16M0V51Z000R0 <span>Under development</span>	16.000MHz	±0.50%	±0.30%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE16M0V530000R0 <span>In Production</span> <span>Recommended</span>	16.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE16M0V53C000R0 <span>In Production</span> <span>Recommended</span>	16.000MHz	±0.50%	±0.15%	-40°C to 125°C	Automotive	SMD
CSTNE16M0V53Z000R0 <span>In Production</span> <span>Recommended</span>	16.000MHz	±0.50%	±0.30%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE16M0VH3C000R0 <span>In Production</span> <span>Recommended</span>	16.000MHz	±0.07%	±0.13%	-40°C to 125°C	Automotive	SMD
CSTNE16M0VH3L000R0 <span>In Production</span> <span>Recommended</span>	16.000MHz	±0.07%	±0.11%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE16M3V530000R0 <span>In Production</span> <span>Recommended</span>	16.384MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE16M5V530000R0 <span>In Production</span> <span>Recommended</span>	16.500MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE16M6V530000R0 <span>In Production</span> <span>Recommended</span>	16.670MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE16M6V53C000R0 <span>In Production</span> <span>Recommended</span>	16.670MHz	±0.50%	±0.15%	-40°C to 125°C	Automotive	SMD

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CSTNE16M6V53Z000R0 <span>In Production</span> <span>Recommended</span>	16.670MHz	±0.50%	±0.30%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE16M8V530000R0 <span>In Production</span> <span>Recommended</span>	16.800MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE16M9V530000R0 <span>In Production</span> <span>Recommended</span>	16.934MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE16M9V53C000R0 <span>In Production</span> <span>Recommended</span>	16.934MHz	±0.50%	±0.15%	-40°C to 125°C	Automotive	SMD
CSTNE16M9V53Z000R0 <span>In Production</span> <span>Recommended</span>	16.934MHz	±0.50%	±0.30%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE17M0V530000R0 <span>In Production</span> <span>Recommended</span>	17.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE17M2V530000R0 <span>In Production</span> <span>Recommended</span>	17.200MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE18M0V510000R0 <span>Under development</span>	18.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE18M0V530000R0 <span>In Production</span> <span>Recommended</span>	18.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE18M0VH3C000R0 <span>In Production</span> <span>Recommended</span>	18.000MHz	±0.07%	±0.13%	-40°C to 125°C	Automotive	SMD
CSTNE18M4V530000R0 <span>In Production</span> <span>Recommended</span>	18.432MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE18M4V53C000R0 <span>In Production</span> <span>Recommended</span>	18.432MHz	±0.50%	±0.15%	-40°C to 125°C	Automotive	SMD
CSTNE18M4V53Z000R0 <span>In Production</span> <span>Recommended</span>	18.432MHz	±0.50%	±0.30%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE18M7V530000R0 <span>In Production</span> <span>Recommended</span>	18.750MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE19M2V530000R0 <span>In Production</span> <span>Recommended</span>	19.200MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD

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CSTNE19M2VH3L000R0 <span>In Production</span> <span>Recommended</span>	19.200MHz	±0.07%	±0.11%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE19M6V510000R0 <span>Under development</span>	19.660MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE19M6V530000R0 <span>In Production</span> <span>Recommended</span>	19.660MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE19M8V530000R0 <span>In Production</span> <span>Recommended</span>	19.800MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE20M0V510000R0 <span>Under development</span>	20.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE20M0V51C000R0 <span>Under development</span>	20.000MHz	±0.50%	±0.30%	-40°C to 125°C	Automotive	SMD
CSTNE20M0V51Z000R0 <span>Under development</span>	20.000MHz	±0.50%	±0.30%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE20M0V530000R0 <span>In Production</span> <span>Recommended</span>	20.000MHz	±0.50%	±0.30%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE20M0V53C000R0 <span>In Production</span> <span>Recommended</span>	20.000MHz	±0.50%	±0.15%	-40°C to 125°C	Automotive	SMD
CSTNE20M0V53Z000R0 <span>In Production</span> <span>Recommended</span>	20.000MHz	±0.50%	±0.30%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE20M0VH3C000R0 <span>In Production</span> <span>Recommended</span>	20.000MHz	±0.07%	±0.13%	-40°C to 125°C	Automotive	SMD
CSTNE20M0VH3L000R0 <span>In Production</span> <span>Recommended</span>	20.000MHz	±0.07%	±0.11%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE8M00G520000R0 <span>Under development</span>	8.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE8M00G52A000R0 <span>Under development</span>	8.000MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
CSTNE8M00G52Z000R0 <span>Under development</span>	8.000MHz	±0.50%	±0.20%	-40°C to 125°C	Consumer/Industrial	SMD

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CSTNE8M00G55000R0 <span>In Production</span> <span>Recommended</span>	8.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE8M00G55A000R0 <span>In Production</span> <span>Recommended</span>	8.000MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
CSTNE8M00G55Z000R0 <span>In Production</span> <span>Recommended</span>	8.000MHz	±0.50%	±0.20%	-40°C to 125°C	Consumer/Industrial	SMD
CSTNE8M00GH5C000R0 <span>In Production</span> <span>Recommended</span>	8.000MHz	±0.07%	±0.13%	-40°C to 125°C	Automotive	SMD
CSTNE8M00GH5L000R0 <span>In Production</span> <span>Recommended</span>	8.000MHz	±0.07%	±0.11%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE8M19G55000R0 <span>In Production</span> <span>Recommended</span>	8.192MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE8M38G52000R0 <span>Under development</span>	8.388MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE8M38G52A000R0 <span>Under development</span>	8.388MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
CSTNE8M38G55000R0 <span>In Production</span> <span>Recommended</span>	8.388MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE8M38G55A000R0 <span>In Production</span> <span>Recommended</span>	8.388MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
CSTNE8M50G55000R0 <span>In Production</span> <span>Recommended</span>	8.500MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE9M00G52000R0 <span>Under development</span>	9.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE9M00G55000R0 <span>In Production</span> <span>Recommended</span>	9.000MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE9M21G52000R0 <span>Under development</span>	9.210MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE9M60GH5L000R0 <span>In Production</span> <span>Recommended</span>	9.600MHz	±0.07%	±0.11%	-40°C to 85°C	Consumer/Industrial	SMD

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CSTNE9M83G52000R0 <small>Under development</small>	9.830MHz	±0.50%	±0.20%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE9M83GH5L000R0 <small>In Production Recommended</small>	9.830MHz	±0.07%	±0.11%	-40°C to 85°C	Consumer/Industrial	SMD
CSTNE9M84G52A000R0 <small>Under development</small>	9.843MHz	±0.50%	±0.20%	-40°C to 125°C	Automotive	SMD
CSTNR4M00GH5C000R0 <small>In Production Recommended</small>	4.000MHz	±0.07%	±0.13%	-40°C to 125°C	Automotive	SMD
CSTNR4M00GH5L000R0 <small>In Production Recommended</small>	4.000MHz	±0.07%	±0.11%	-20°C to 85°C	Consumer/Industrial	SMD
CSTNR4M91GH5L000R0 <small>In Production Recommended</small>	4.915MHz	±0.07%	±0.11%	-20°C to 85°C	Consumer/Industrial	SMD
CSTNR5M00GH5C000R0 <small>In Production Recommended</small>	5.000MHz	±0.07%	±0.13%	-40°C to 125°C	Automotive	SMD
CSTNR5M00GH5L000R0 <small>In Production Recommended</small>	5.000MHz	±0.07%	±0.11%	-20°C to 85°C	Consumer/Industrial	SMD
CSTNR6M00GH5C000R0 <small>In Production Recommended</small>	6.000MHz	±0.07%	±0.13%	-40°C to 125°C	Automotive	SMD
CSTNR6M00GH5L000R0 <small>In Production Recommended</small>	6.000MHz	±0.07%	±0.11%	-20°C to 85°C	Consumer/Industrial	SMD
CSTNR7M37GH5L000R0 <small>In Production Recommended</small>	7.370MHz	±0.07%	±0.11%	-20°C to 85°C	Consumer/Industrial	SMD

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Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

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- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
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- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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