



AEC-Q200 Compliant Chip Multilayer Ceramic Capacitors for Automotive Infotainment/Comfort Equipment & Industrial Equipment

AEC-Q200 compliant capacitor (Grade2 or Grade3) .

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Specific Applications

For the detail of specific applications, please refer to the following links or specification sheets.

- > [Specific Applications Details](#)
- > [Precautions for use](#)

Consumer equipment	Industrial equipment	Automotive infotainment/comfort equipment	Automotive powertrain/safety equipment	Medical equipment [GHTF A/B/C] except for implant equipment	Implanted medical equipment / medical equipment [GHTF]
	✓	✓		✓	

<Related Links>

You can find the recommended uses for each series in the "Applications" section of the FAQ below.

- > [What are the differences between the GCM, GRT, and GRM series?](#)

Features

1. This product has cleared AEC-Q200 compliant test conditions.

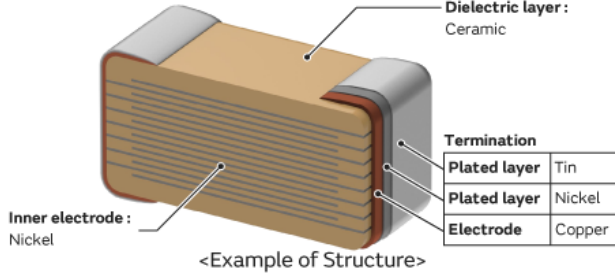
This series is designed for use in Car Multimedia, Car Interior, Car Comfort application and General Electronic equipment. It is not appropriate for use in applications critical to passenger safety and car driving function (e.g. ABS,AIRBAG, etc.) . Please use the GCM series in critical applications.

Items	Maximum operating temperature	Test Method	
		AEC-Q200 compliant [GRT] Series	General Purpose [GRM] Series
Temperature Cycle	125°C product	Test temperature: -55 ~ 105°C. Temperature Cycle: 1,000 cycles Test temperature: -55 ~ 125°C. Temperature Cycle: 5 cycles	Test temperature: Minimum operating temperature ~ Maximum operating temperature Temperature cycle: 5 cycles
	105°C product	Test temperature: -55 ~ 105°C. Temperature Cycle: 1,000 cycles	
	85°C product	Test temperature: -55 ~ 85°C. Temperature Cycle: 1,000 cycles	
Humidity Loading	-	Test temperature: 85±2°C Test humidity: 80 ~ 85%RH Test time: 1,000 hours	Test temperature: 40±2°C Test humidity: 90 ~ 95%RH Test time: 500 hours

2. AEC-Q200 compliant (Grade2 or Grade3)

125°C product: Grade2.
 105°C product: Grade2.
 85°C product: Grade3.

3. Sn plating is applied to the external electrodes; excellent solderability.



Specifications

Size (mm)	0.6x0.3mm - 3.2x2.5mm
Rated Voltage	2.5Vdc - 100Vdc
Capacitance	0.1pF - 100μF
Main applications	Such as Information and Comfort equipment,car navigation,communication module and entertainment system

Lineup

[Go to the part number list](#)



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You can see the search result of the item you click on the capacitance chart.

Temperature compensating type

[Use narrowed products' rows](#)

[Clearing all the conditions](#)



Maximum operating temperature	<input type="checkbox"/> 125°C
LxW	<input type="checkbox"/> 0.6×0.3 <input type="checkbox"/> 1.0×0.5 <input type="checkbox"/> 1.6×0.8 <input type="checkbox"/> 2.0×1.25 <input type="checkbox"/> 3.2×1.6
Rated Voltage	<input type="checkbox"/> 100Vdc <input type="checkbox"/> 50Vdc <input type="checkbox"/> 25Vdc <input type="checkbox"/> 16Vdc

Available Under development

Maximum operating temperature	LxW	Rated Voltage	Capacitance												Capacitance range
			pF						μF						
			0.1	1	10	100	1000	0.01	0.1	1	10	100	1000		
125°C	0.6×0.3	100Vdc	Available	Available	Available	Available	Available								0.1pF - 100pF
		50Vdc	Available	Available	Available	Available	Available								0.1pF - 220pF
		25Vdc	Available	Available	Available	Available	Available								0.1pF - 1,000pF
	1.0×0.5	100Vdc	Available	Available	Available	Available	Available								0.2pF - 100pF
		50Vdc	Available	Available	Available	Available	Available								0.11pF - 1,000pF
		25Vdc			Available	Available	Available								10pF - 1,000pF
	1.6×0.8	100Vdc				Available	Available								120pF - 1,500pF
		50Vdc					Available	Available							1,200pF - 10,000pF
		25Vdc					Available	Available							1,200pF - 10,000pF
	2.0×1.25	100Vdc					Available								1,800pF - 3,300pF
		50Vdc						Available							18,000pF - 22,000pF

Maximum operating temperature	LxW	Rated Voltage	Capacitance												Capacitance range			
			pF					μF										
			0.1	1	10	100	1000	0.01	0.1	1	10	100	1000					
		25Vdc																1,800pF - 2,200pF
	3.2×1.6	100Vdc																3,900pF - 0.1μF
		50Vdc																56,000pF - 0.1μF
		25Vdc																0.1μF - 0.12μF
		16Vdc																0.12μF

High dielectric constant type

Use narrowed products' rows ?

Clearing all the conditions ?

Maximum operating temperature	<input type="checkbox"/> 85°C <input type="checkbox"/> 105°C <input type="checkbox"/> 125°C
LxW	<input type="checkbox"/> 0.6×0.3 <input type="checkbox"/> 1.0×0.5 <input type="checkbox"/> 1.6×0.8 <input type="checkbox"/> 2.0×1.25 <input type="checkbox"/> 3.2×1.6 <input type="checkbox"/> 3.2×2.5
Rated Voltage	<input type="checkbox"/> 35Vdc <input type="checkbox"/> 25Vdc <input type="checkbox"/> 16Vdc <input type="checkbox"/> 10Vdc <input type="checkbox"/> 6.3Vdc <input type="checkbox"/> 4Vdc <input type="checkbox"/> 50Vdc <input type="checkbox"/> 2.5Vdc <input type="checkbox"/> 100Vdc

■ Available ■ Under development

Maximum operating temperature	LxW	Rated Voltage	Capacitance												Capacitance range			
			pF					μF										
			0.1	1	10	100	1000	0.01	0.1	1	10	100	1000					
85°C	0.6×0.3	35Vdc																0.1μF
		25Vdc																100pF - 0.1μF
		16Vdc																10,000pF - 0.1μF
		10Vdc																1,500pF - 0.22μF
		6.3Vdc																10,000pF - 1μF
		4Vdc																1μF
	1.0×0.5	35Vdc																0.22μF - 1μF
		25Vdc																0.22μF - 2.2μF
		16Vdc																0.22μF - 2.2μF
		10Vdc																0.22μF - 10μF
		6.3Vdc																0.22μF - 10μF
		4Vdc																4.7μF
	1.6×0.8	50Vdc																1μF - 2.2μF
		35Vdc																2.2μF - 4.7μF
		25Vdc																2.2μF - 10μF
		16Vdc																4.7μF - 10μF

