



Chip Multilayer Ceramic Capacitors for Automotive

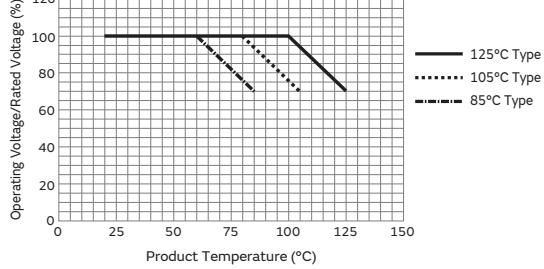
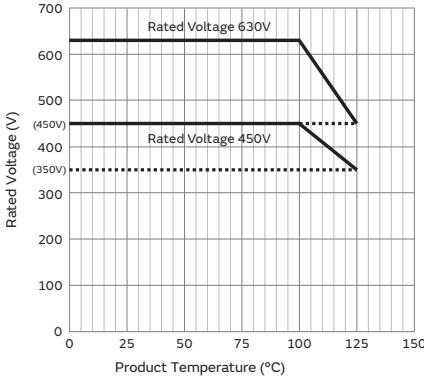
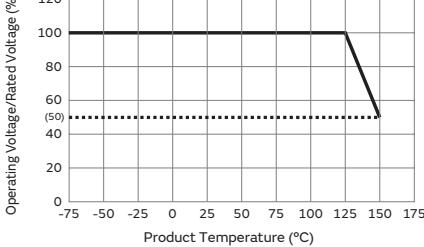


2017

Explanation of Symbols in This Catalog



Links are provided to the latest information from the PDF version of the catalog, which is available on the web.

General	For applications that do not require the particular reliability such as the general equipment	D1 Derating 1	Derating 1 This product is suitable when a voltage continuously applied to a capacitor in an operating circuit, is used below (derated) the rated voltage of the capacitor. This model guarantees the test conditions in the endurance test, at a rated voltage $\times 100\%$ at the maximum operating temperature. A reliability assurance level equivalent to a common product can be secured, by using this product within the voltage and temperature derated conditions recommended in the figure below. Recommended Conditions of the Derating Operating Voltage and Temperature
Info-tainment	Infotainment for Automotive The product for entertainment equipment like car navigations, car audios, and body control equipment like wipers, power windows.		
Power-train	Powertrain/Safety for Automotive Product used for applications (running, turning, stopping and safety devices) which particularly concern human life, such as in devices for automobiles.	D2 Derating 2	Derating 2 When the product temperature exceeds 105°C, please use this product within the voltage and temperature derated conditions in the figure below.
Medical Device	Medical-grade products for Implanted Medical Devices These products are intended for use in implanted medical devices such as cardiac pacemakers, cochlear implants, insulin pumps and gastric electrostimulators. They are suitable for use in non-critical circuits. *1 *1 Non-critical circuits This term refers to circuits in implanted medical devices that are not directly linked to life support, i.e. circuits that will not directly endanger the life of the patient should the functionality of the device be reduced or halted by failure of the circuit.		
AEC-Q200	AEC-Q200 compliant product	D3 Derating 3	Derating 3 Please apply the derating curve according to the operating temperature. Please refer to detailed specifications sheet for details.
Safety standard	Safety Standard Certified Product Products that acquired safety standard certification IEC60384-14 and products based on the Electrical Appliance and Material Safety Law of Japan.		Derating 4 When the product temperature exceeds 125°C, please use this product within the voltage and temperature derated conditions in the figure below.
High Q	Low dissipation for high frequency By devising ceramic materials and electrode materials, low dissipation is achieved in frequency bands of VHF, UHF and microwave or beyond.	D4 Derating 4	
Low ESL	Low inductance This capacitor is designed so that the parasitic inductance component (ESL) that the capacitor has on the high frequency side becomes lower.		Derating 5 Please apply the rated voltage derating over 150°C. Please refer to detailed specifications sheet for details.
Fail safe	Fail safe product This capacitor is designed to prevent failures as much as possible by short mode.		
Deflecting crack	Product resistant to deflection cracking This capacitor is designed to prevent failures as much as possible by short mode caused by cracking when there is board deflection.		
Soldering crack	Product with solder cracking suppression This capacitor is configured with metal terminals and leads connected to the chip. The metal terminals and leads relieve the stress from expansion and contraction of the solder, to suppress solder cracking.		
Anti-noise	Product suitable for acoustic noise reduction and low distortion This product suppresses acoustic noise, which occurs when a ceramic capacitor is used, by devising the materials and configuration.		
Effective Cap	No DC bias characteristics Polymer capacitor is no capacitance change with DC bias due to aluminum oxidized film for dielectric.		
EMI FIL®	Low-inductance product suitable for noise suppression. This product has extremely low ESL and is suitable for suppression of noise, including high frequencies. This product can also be used as a low-ESL, high-performance bypass capacitor.		
Limited to conductive glue mounting	Limited to Conductive Glue Mounting Since silver palladium is used for the external electrodes, the capacitor can be mounted by conductive adhesive.		

Selection Guide for Capacitors

Infotainment for automotive		
Infotainment	SMD	
AEC-Q200	Solder mounting	
	Chip type	 P23

Powertrain/Safety for automotive		
Powertrain	SMD	
AEC-Q200	Solder mounting	
	Chip type	 P29  Anti-noise High effective capacitance & high ripple current P37  Fail-safe Defecting crack Soft termination P39  Water Repellent WEB  WEB  High Q WEB  WEB  Fail-safe Defecting crack MLSC design P45  Fail-safe Defecting crack Soft termination MLSC design P47  Fail-safe Defecting crack Water Repellent MLSC design WEB  WEB  Low ESL 3 terminals P49
	Metal terminal type	 Anti-noise Defecting crack Soldering crack WEB  WEB  Anti-noise Defecting crack Soldering crack High effective capacitance & high ripple current P54  Safety standard Anti-noise Defecting crack Soldering crack P57
Limited to conductive glue mounting	Limited to conductive glue mounting	Limited to conductive glue mounting
	Chip type	 Defecting crack Soldering crack Ni plating + Pd plating termination conductive glue mounting WEB  WEB  Defecting crack Soldering crack AgPd termination conductive glue mounting P60
Lead type		
	Solder mounting	 Anti-noise Defecting crack Soldering crack WEB  WEB  Anti-noise Defecting crack Soldering crack 150°C operation leaded WEB  WEB  Anti-noise Defecting crack Soldering crack 200°C operation leaded WEB  WEB  Safety standard WEB

Medical-grade products for implanted medical devices		
Medical Device	SMD	
	Solder mounting	
	Chip type	 WEB  WEB

For general		
General	SMD	
	Solder mounting	
	Chip type	 WEB  WEB For LCD backlight inverter circuit only  WEB  Anti-noise High effective capacitance & high ripple current  WEB  Defecting crack Soft termination  WEB  Water Repellent  WEB  WEB For information devices only  WEB  WEB For camera flash circuit only  WEB  High Q  WEB  High Q High power  WEB  WEB Based on the Electrical Appliance and Material Safety Law of Japan  WEB  Safety standard  WEB  Low ESL LW reversed  WEB  Low ESL 8 terminals  WEB  Low ESL 10 terminals  WEB  Low ESL LW reversed controlled ESR  WEB  Low ESL 3 terminals  WEB  Anti-noise Low distortion  WEB  Anti-noise Low acoustic noise  WEB
	On interposer board	
	Chip type	 Anti-noise  WEB  Anti-noise  WEB
	Metal terminal type	 Anti-noise Defecting crack Soldering crack  WEB  Anti-noise Defecting crack Soldering crack High effective capacitance & high ripple current  WEB
	Resin molding SMD type	 Safety standard  WEB
	Wire bonding mounting	
	Chip type	 Microchip  WEB   WEB
	Lead type	
	Solder mounting	 Anti-noise Defecting crack Soldering crack  WEB  WEB High temperature low loss  WEB  WEB High temperature Class 1  WEB  WEB Class 2  WEB  WEB  WEB For LCD backlight inverter circuit only  WEB  Ultrahigh-voltage Defecting crack Soldering crack  WEB  WEB Based on the Electrical Appliance and Material Safety Law of Japan  WEB  Safety standard X1/Y1 Class certified product  WEB  Safety standard X1/Y2 Class certified product  WEB
	Screw termination mounting	
	Chip type	 Ultrahigh-voltage  WEB  Ultrahigh-voltage High voltage AC rated  WEB

● Part Numbering

Chip Multilayer Ceramic Capacitors for Automotive



(Part Number)

GC	M	18	8	R7	1H	102	K	A37	D
1	2	3	4	5	6	7	8	9	10

① Product ID

② Series

Product ID	Code	Series
GC	3	High effective capacitance & High allowable ripple current
	D	Specially designed product to reduce shorts
	E	Specially designed product to reduce shorts & resin electrode product
	G	Limited to conductive glue mounting
	J	Soft termination type
	M	For automotive
GR	T	Meet AEC-Q200 for infotainment
KC	3	Metal terminal type/High effective capacitance & High allowable ripple current
	A	Metal terminal type/ Safety standard certified product
	M	Metal terminal type

③ Chip Dimension (L x W)

Code	Dimension (L x W)	EIA
03	0.6 x 0.3mm	0201
15	1.0 x 0.5mm	0402
18	1.6 x 0.8mm	0603
21	2.0 x 1.25mm	0805
31	3.2 x 1.6mm	1206
32	3.2 x 2.5mm	1210
43	4.5 x 3.2mm	1812
55	5.7 x 5.0mm	2220

④ Temperature Characteristics

Temperature Characteristic Codes			Temperature Characteristics			Operating Temperature Range	Capacitance Change Each Temperature (%)						
Code	Public STD Code		Reference Temperature	Temperature Range	Capacitance Change or Temperature Coefficient		-55°C		*4		-10°C		
	Code	STD Code					Max.	Min.	Max.	Min.	Max.	Min.	
5C	COG	EIA	25°C	25 to 125°C	0±30ppm/°C	-55 to 125°C	0.58	-0.24	0.4	-0.17	0.25	-0.11	
5G	X8G	*2	25°C	25 to 150°C	0±30ppm/°C	-55 to 150°C	0.58	-0.24	0.4	-0.17	0.25	-0.11	
7U	U2J	EIA	25°C	25 to 125°C *3	-750±120ppm/°C	-55 to 125°C	8.78	5.04	6.04	3.47	3.84	2.21	
9E	ZLM	*2	20°C	-55 to -40°C	-4700+1000/-2500ppm/°C	-55 to 125°C	-	-	-	-	-	-	
				-40 to 20°C	-5350±750ppm/°C		-	-	-	-	-	-	
				20 to 85°C	-4700±500ppm/°C		-	-	-	-	-	-	
				85 to 125°C	-4700+2000/-1000ppm/°C		-	-	-	-	-	-	
C7	X7S	EIA	25°C	-55 to 125°C	±22%	-55 to 125°C	-	-	-	-	-	-	
C8	X6S	EIA	25°C	-55 to 105°C	±22%	-55 to 105°C	-	-	-	-	-	-	
D7	X7T	EIA	25°C	-55 to 125°C	+22%, -33%	-55 to 125°C	-	-	-	-	-	-	
L8	X8L	*2	25°C	-55 to 150°C	+15%, -40%	-55 to 150°C	-	-	-	-	-	-	
M8	X8M	*2	25°C	-55 to 150°C	+15%, -50%	-55 to 150°C	-	-	-	-	-	-	
R6	X5R	EIA	25°C	-55 to 85°C	±15%	-55 to 85°C	-	-	-	-	-	-	
R7	X7R	EIA	25°C	-55 to 125°C	±15%	-55 to 125°C	-	-	-	-	-	-	
R9	X8R	EIA	25°C	-55 to 150°C	±15%	-55 to 150°C	-	-	-	-	-	-	

*1 Capacitance change is specified with 50% rated voltage applied.

*2 Murata Temperature Characteristic Code.

*3 Rated Voltage 100Vdc max: 25 to 85°C

*4 -25°C (Reference Temperature 20°C) / -30°C (Reference Temperature 25°C)

Continued on the following page. ↗

(Part Number)

GC	M	18	8	R7	1H	102	K	A37	D
1	2	3	4	5	6	7	8	9	10

Continued from the preceding page. ↴

⑥ Rated Voltage

Code	Standard Product	Rated Voltage
OE	-	DC2.5V
OG	-	DC4V
OJ	EC	DC6.3V
1A	ED	DC10V
1C	EE	DC16V
1E	EF	DC25V
YA	EG	DC35V
1H	EH	DC50V
1J	-	DC63V
1K	-	DC80V
2A	EL	DC100V
2E	-	DC250V
2W	LP	DC450V
2J	LQ	DC630V
3A	-	DC1kV
MF	-	X1/Y2: AC250V (Safety Standard Certified Type MF)

⑧ Capacitance Tolerance

Code	Capacitance Tolerance
C	±0.25pF
D	±0.5pF (Less than 10pF)
	±0.5% (10pF and over)
J	±5%
K	±10%
M	±20%

⑨ Individual Specification Code

Expressed by three figures.

⑩ Package

Code	Package
L	ø180mm Embossed Taping
D/W	ø180mm Paper Taping
K	ø330mm Embossed Taping
J	ø330mm Paper Taping

⑦ Capacitance

Expressed by three-digit alphanumerics. The unit is pico-farad (pF). The first and second figures are significant digits, and the third figure expresses the number of zeros that follow the two numbers.

If there is a decimal point, it is expressed by the capital letter "R." In this case, all figures are significant digits.

If any letter, other than "R" is included, this indicates the specific part number is a non-standard part.

Ex.)	Code	Capacitance
	R50	0.50pF
	1R0	1.0pF
	100	10pF
	103	10000pF

Please contact us if you find any part number not provided in this table.

3 Terminal Low ESL Multilayer Ceramic Capacitors



(Part Number)

NF M 3D CC 102 R 1H 3 L
 1 2 3 4 5 6 7 8 9

①Product ID ②Series

Product ID	Series
NFM	3 Terminal Low ESL Type

③Dimensions (LxW)

Code	Dimensions (LxW)	EIA
21	2.0x1.25mm	0805
31	3.2x1.6mm	1206

④Features

Code	Features	
HC	Powertrain/Safety for Automotive	For Signal Lines / For Large Current
HK		For Very Large Current

⑤Capacitance

Expressed by three figures. The unit is in pico-farad (pF). The first and second figures are significant digits, and the third figure expresses the number of zeros that follow the two figures.

⑥Characteristics

Code	Capacitance Temperature Characteristics
R	±15%, +15/-18%

⑦Rated Voltage

Code	Rated Voltage
1A	10V
1C	16V
1H	50V
2A	100V

⑧Electrode

Code	Electrode
3	Sn Plating

⑨Packaging

Code	Packaging
L	Embossed Taping (ø180mm Reel)
D	Paper Taping (ø180mm Reel)

Please contact us if you find any part number not provided in this table.

Chip Multilayer Ceramic Capacitors for Automotive

GCM Series



Capacitor for automotive applications such as power train and safety equipment.

Features

1 Ideal for powertrains and safety devices in automotive.

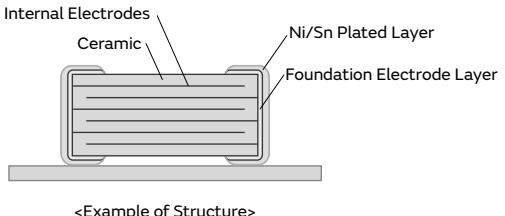
This product can be used for safety devices, such as the drive system control for engine ECU, air bags, and ABS. This product has cleared test conditions more severe than that of general products (GRM Series) even in temperature cycle and humidity load tests.

	General Purpose GRM Series Maximum operating temperature: 125°C	GCM Series for Automotive Maximum operating temperature: 150°C
Items	Test Method	Test Method
Temperature Cycle	Temperature Cycle: 5 cycles	Temperature Cycle: 100 cycles (1,000 cycles for AEC-Q200 conforming products)
Humidity Loading	Test temperature: 40±2°C Test humidity: 90 to 95%RH Test time: 500 hours	Test temperature: 85±2°C Test humidity: 80 to 85%RH Test time: 500 hours (1,000 hours for AEC-Q200 conforming products)

2 Can be used at 125°C and 150°C temperatures.

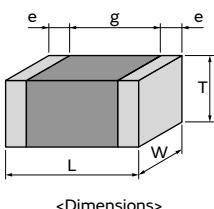
We also offer a lineup for 150°C that can be used in the engine room.

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



Specifications

Size	0.6×0.3mm to 5.7×5.0mm
Rated Voltage	4Vdc to 1000Vdc
Capacitance	0.10pF to 47μF
Main Applications	Safety equipment, such as drive system control, air bags, and ABS of engine ECU



GCM Series Temperature Compensating Type Power-train AEC-Q200 Part Number List

1.0×0.5mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.55mm	50Vdc	C0G	1.0pF	±0.25pF	GCM1555C1H1R0CA16#
			2.0pF	±0.25pF	GCM1555C1H2R0CA16#
			3.0pF	±0.25pF	GCM1555C1H3R0CA16#
			4.0pF	±0.25pF	GCM1555C1H4R0CA16#
			5.0pF	±0.25pF	GCM1555C1H5R0CA16#
			6.0pF	±0.5pF	GCM1555C1H6R0DA16#
			7.0pF	±0.5pF	GCM1555C1H7R0DA16#
			8.0pF	±0.5pF	GCM1555C1H8R0DA16#
			9.0pF	±0.5pF	GCM1555C1H9R0DA16#
			10pF	±5%	GCM1555C1H100JA16#
			12pF	±5%	GCM1555C1H120JA16#
			15pF	±5%	GCM1555C1H150JA16#
			18pF	±5%	GCM1555C1H180JA16#
			22pF	±5%	GCM1555C1H220JA16#
			27pF	±5%	GCM1555C1H270JA16#
			33pF	±5%	GCM1555C1H330JA16#
			39pF	±5%	GCM1555C1H390JA16#
			47pF	±5%	GCM1555C1H470JA16#
			56pF	±5%	GCM1555C1H560JA16#
			68pF	±5%	GCM1555C1H680JA16#
			82pF	±5%	GCM1555C1H820JA16#
			100pF	±5%	GCM1555C1H101JA16#
			120pF	±5%	GCM1555C1H121JA16#
			150pF	±5%	GCM1555C1H151JA16#
			180pF	±5%	GCM1555C1H181JA16#
			220pF	±5%	GCM1555C1H221JA16#
			270pF	±5%	GCM1555C1H271JA16#
			330pF	±5%	GCM1555C1H331JA16#
			390pF	±5%	GCM1555C1H391JA16#
			470pF	±5%	GCM1555C1H471JA16#
			560pF	±5%	GCM1555C1H561JA16#
			680pF	±5%	GCM1555C1H681JA16#
			820pF	±5%	GCM1555C1H821JA16#
			1000pF	±5%	GCM1555C1H102JA16#
X8G	1.0pF	X8G	1.0pF	±0.25pF	GCM1555G1H1R0CA16#
			2.0pF	±0.25pF	GCM1555G1H2R0CA16#
			3.0pF	±0.25pF	GCM1555G1H3R0CA16#
			4.0pF	±0.25pF	GCM1555G1H4R0CA16#
			5.0pF	±0.25pF	GCM1555G1H5R0CA16#
			12pF	±5%	GCM1555G1H120JA16#
			15pF	±5%	GCM1555G1H150JA16#
			18pF	±5%	GCM1555G1H180JA16#
			22pF	±5%	GCM1555G1H220JA16#
			27pF	±5%	GCM1555G1H270JA16#
			33pF	±5%	GCM1555G1H330JA16#
			39pF	±5%	GCM1555G1H390JA16#
			47pF	±5%	GCM1555G1H470JA16#
			56pF	±5%	GCM1555G1H560JA16#
			68pF	±5%	GCM1555G1H680JA16#
			82pF	±5%	GCM1555G1H820JA16#
			100pF	±5%	GCM1555G1H101JA16#
			120pF	±5%	GCM1555G1H121JA16#
U2J	1000pF	U2J	1000pF	±5%	GCM1887U2A102JA16#
			1200pF	±5%	GCM1887U2A122JA16#
			1500pF	±5%	GCM1885C2A152JA16#
			1000pF	±5%	GCM1887U2A102JA16#

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.55mm	50Vdc	X8G	150pF	±5%	GCM1555G1H151JA16#
			180pF	±5%	GCM1555G1H181JA16#
			220pF	±5%	GCM1555G1H221JA16#
			270pF	±5%	GCM1555G1H271JA16#
			330pF	±5%	GCM1555G1H331JA16#
			390pF	±5%	GCM1555G1H391JA16#
			470pF	±5%	GCM1555G1H471JA16#
			560pF	±5%	GCM1555G1H561JA16#
			680pF	±5%	GCM1555G1H681JA16#
			820pF	±5%	GCM1555G1H821JA16#
			1000pF	±5%	GCM1555G1H102JA16#

1.6×0.8mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.9mm	100Vdc	COG	1.0pF	±0.25pF	GCM1885C2A1R0CA16#
			2.0pF	±0.25pF	GCM1885C2A2R0CA16#
			3.0pF	±0.25pF	GCM1885C2A3R0CA16#
			4.0pF	±0.25pF	GCM1885C2A4R0CA16#
			5.0pF	±0.25pF	GCM1885C2A5R0CA16#
			6.0pF	±0.5pF	GCM1885C2A6R0DA16#
			7.0pF	±0.5pF	GCM1885C2A7R0DA16#
			8.0pF	±0.5pF	GCM1885C2A8R0DA16#
			9.0pF	±0.5pF	GCM1885C2A9R0DA16#
			10pF	±5%	GCM1885C2A100JA16#
			12pF	±5%	GCM1885C2A120JA16#
			15pF	±5%	GCM1885C2A150JA16#
			18pF	±5%	GCM1885C2A180JA16#
			22pF	±5%	GCM1885C2A220JA16#
			27pF	±5%	GCM1885C2A270JA16#
			33pF	±5%	GCM1885C2A330JA16#
			39pF	±5%	GCM1885C2A390JA16#
			47pF	±5%	GCM1885C2A470JA16#
			56pF	±5%	GCM1885C2A560JA16#
			68pF	±5%	GCM1885C2A680JA16#
			82pF	±5%	GCM1885C2A820JA16#
			100pF	±5%	GCM1885C2A101JA16#
			120pF	±5%	GCM1885C2A121JA16#
			150pF	±5%	GCM1885C2A151JA16#
			180pF	±5%	GCM1885C2A181JA16#
			220pF	±5%	GCM1885C2A221JA16#
			270pF	±5%	GCM1885C2A271JA16#
			330pF	±5%	GCM1885C2A331JA16#
			390pF	±5%	GCM1885C2A391JA16#
			470pF	±5%	GCM1885C2A471JA16#
			560pF	±5%	GCM1885C2A561JA16#
			680pF	±5%	GCM1885C2A681JA16#
			820pF	±5%	GCM1885C2A821JA16#
			1000pF	±5%	GCM1885C2A102JA16#
			1200pF	±5%	GCM1885C2A122JA16#

Part number # indicates the package specification code.

GCM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.9mm	100Vdc	U2J	1500pF	±5%	GCM1887U2A152JA16#
			1800pF	±5%	GCM1887U2A182JA16#
			2200pF	±5%	GCM1887U2A222JA16#
			2700pF	±5%	GCM1887U2A272JA16#
			3300pF	±5%	GCM1887U2A332JA16#
			3900pF	±5%	GCM1887U2A392JA16#
			4700pF	±5%	GCM1887U2A472JA16#
			5600pF	±5%	GCM1887U2A562JA16#
			6800pF	±5%	GCM1887U2A682JA16#
			8200pF	±5%	GCM1887U2A822JA16#
50Vdc	COG	1.0pF	1.0pF	±0.25pF	GCM1885C1H1R0CA16#
			2.0pF	±0.25pF	GCM1885C1H2R0CA16#
			3.0pF	±0.25pF	GCM1885C1H3R0CA16#
			4.0pF	±0.25pF	GCM1885C1H4R0CA16#
			5.0pF	±0.25pF	GCM1885C1H5R0CA16#
			6.0pF	±0.5pF	GCM1885C1H6R0DA16#
			7.0pF	±0.5pF	GCM1885C1H7R0DA16#
			8.0pF	±0.5pF	GCM1885C1H8R0DA16#
			9.0pF	±0.5pF	GCM1885C1H9R0DA16#
			10pF	±5%	GCM1885C1H100JA16#
U2J	100Vdc	1.25pF	12pF	±5%	GCM1885C1H120JA16#
			15pF	±5%	GCM1885C1H150JA16#
			18pF	±5%	GCM1885C1H180JA16#
			22pF	±5%	GCM1885C1H220JA16#
			27pF	±5%	GCM1885C1H270JA16#
			33pF	±5%	GCM1885C1H330JA16#
			39pF	±5%	GCM1885C1H390JA16#
			47pF	±5%	GCM1885C1H470JA16#
			56pF	±5%	GCM1885C1H560JA16#
			68pF	±5%	GCM1885C1H680JA16#
1200pF	COG	1.25pF	82pF	±5%	GCM1885C1H820JA16#
			100pF	±5%	GCM1885C1H101JA16#
			120pF	±5%	GCM1885C1H121JA16#
			150pF	±5%	GCM1885C1H151JA16#
			180pF	±5%	GCM1885C1H181JA16#
			220pF	±5%	GCM1885C1H221JA16#
			270pF	±5%	GCM1885C1H271JA16#
			330pF	±5%	GCM1885C1H331JA16#
			390pF	±5%	GCM1885C1H391JA16#
			470pF	±5%	GCM1885C1H471JA16#
1200pF	ZLM	1.25pF	560pF	±5%	GCM1885C1H561JA16#
			680pF	±5%	GCM1885C1H681JA16#
			820pF	±5%	GCM1885C1H821JA16#
			1000pF	±5%	GCM1885C1H102JA16#
			1200pF	±5%	GCM1885C1H122JA16#
			1500pF	±5%	GCM1885C1H152JA16#
			1800pF	±5%	GCM1885C1H182JA16#
			2200pF	±5%	GCM1885C1H222JA16#
			2700pF	±5%	GCM1885C1H272JA16#
			3300pF	±5%	GCM1885C1H332JA16#
1200pF	COG	1.25pF	3900pF	±5%	GCM1885C1H392JA16#
			4700pF	±5%	GCM1885C1H472JA16#
			5600pF	±5%	GCM1885C1H562JA16#
			6800pF	±5%	GCM1885C1H682JA16#
			8200pF	±5%	GCM1885C1H822JA16#
			10000pF	±5%	GCM1885C1H103JA16#
			12000pF	±5%	GCM1885C1H123JA16#
			15000pF	±5%	GCM1885C1H153JA16#
			18000pF	±5%	GCM1885C1H183JA16#
			22000pF	±5%	GCM1885C1H223JA16#
1200pF	COG	1.25pF	27000pF	±5%	GCM1885C1H273JA16#
			33000pF	±5%	GCM1885C1H333JA16#
			39000pF	±5%	GCM1885C1H393JA16#
			47000pF	±5%	GCM1885C1H473JA16#
			56000pF	±5%	GCM1885C1H563JA16#
			68000pF	±5%	GCM1885C1H683JA16#
			82000pF	±5%	GCM1885C1H823JA16#
			100000pF	±5%	GCM1885C1H103JA16#
			120000pF	±5%	GCM1885C1H123JA16#
			150000pF	±5%	GCM1885C1H153JA16#

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.9mm	50Vdc	U2J	1500pF	±5%	GCM1887U1H152JA16#
			1800pF	±5%	GCM1887U1H182JA16#
			2200pF	±5%	GCM1887U1H222JA16#
			2700pF	±5%	GCM1887U1H272JA16#
			3300pF	±5%	GCM1887U1H332JA16#
			3900pF	±5%	GCM1887U1H392JA16#
			4700pF	±5%	GCM1887U1H472JA16#
			5600pF	±5%	GCM1887U1H562JA16#
			6800pF	±5%	GCM1887U1H682JA16#
			8200pF	±5%	GCM1887U1H822JA16#
0.95mm	50Vdc	ZLM	1000pF	±10%	GCM2199E2A102KA05#
			1000pF	±20%	GCM2199E2A102MA05#
			1100pF	±10%	GCM2199E2A112KA05#
			1100pF	±20%	GCM2199E2A112MA05#
			1200pF	±10%	GCM2199E2A122KA05#
			1200pF	±20%	GCM2199E2A122MA05#
			1300pF	±10%	GCM2199E2A132KA05#
			1300pF	±20%	GCM2199E2A132MA05#
			1500pF	±10%	GCM2199E2A152KA05#
			1500pF	±20%	GCM2199E2A152MA05#
0.95mm	50Vdc	COG	4700pF	±5%	GCM2165C1H472JA16#
			10000pF	±5%	GCM2195C1K153JA16#
			15000pF	±5%	GCM2195C1J153JA16#
			20000pF	±5%	GCM2195C1H153JA16#
			25000pF	±5%	GCM2195C1H253JA16#
			30000pF	±5%	GCM2195C1H303JA16#
			35000pF	±5%	GCM2195C1H353JA16#
			40000pF	±5%	GCM2195C1H403JA16#
			45000pF	±5%	GCM2195C1H453JA16#
			50000pF	±5%	GCM2195C1H503JA16#

GCM Series Temperature Compensating Type Power-train AEC-Q200 Part Number List

(→ 2.0×1.25mm)

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number	T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.0mm	630Vdc	COG	10pF	±5%	GCM21A5C2J100JX01#	1.0mm	250Vdc	U2J	150pF	±5%	GCM21A7U2E151JX01#
			12pF	±5%	GCM21A5C2J120JX01#				180pF	±5%	GCM21A7U2E181JX01#
			15pF	±5%	GCM21A5C2J150JX01#				220pF	±5%	GCM21A7U2E221JX01#
			18pF	±5%	GCM21A5C2J180JX01#				270pF	±5%	GCM21A7U2E271JX01#
			22pF	±5%	GCM21A5C2J220JX01#				330pF	±5%	GCM21A7U2E331JX01#
			27pF	±5%	GCM21A5C2J270JX01#				390pF	±5%	GCM21A7U2E391JX01#
			33pF	±5%	GCM21A5C2J330JX01#				470pF	±5%	GCM21A7U2E471JX01#
			39pF	±5%	GCM21A5C2J390JX01#				560pF	±5%	GCM21A7U2E561JX01#
			47pF	±5%	GCM21A5C2J470JX01#				680pF	±5%	GCM21A7U2E681JX01#
			56pF	±5%	GCM21A5C2J560JX01#				820pF	±5%	GCM21A7U2E821JX01#
			68pF	±5%	GCM21A5C2J680JX01#				1000pF	±5%	GCM21A7U2E102JX01#
			82pF	±5%	GCM21A5C2J820JX01#				1200pF	±5%	GCM21A7U2E122JX01#
			100pF	±5%	GCM21A5C2J101JX01#				1500pF	±5%	GCM21A7U2E152JX01#
			120pF	±5%	GCM21A5C2J121JX01#				1800pF	±5%	GCM21A7U2E182JX01#
			150pF	±5%	GCM21A5C2J151JX01#				2200pF	±5%	GCM21A7U2E222JX01#
	250Vdc	COG	180pF	±5%	GCM21A5C2J181JX01#	1.4mm	80Vdc	COG	18000pF	±5%	GCM21B5C1K183JA16#
			220pF	±5%	GCM21A5C2J221JX01#				20000pF	±5%	GCM21B5C1K203JA16#
			270pF	±5%	GCM21A5C2J271JX01#				22000pF	±5%	GCM21B5C1K223JA16#
			330pF	±5%	GCM21A5C2J331JX01#		63Vdc	COG	18000pF	±5%	GCM21B5C1J183JA16#
			390pF	±5%	GCM21A5C2J391JX01#				20000pF	±5%	GCM21B5C1J203JA16#
			470pF	±5%	GCM21A5C2J471JX01#				22000pF	±5%	GCM21B5C1J223JA16#
			560pF	±5%	GCM21A5C2J561JX01#		50Vdc	COG	18000pF	±5%	GCM21B5C1H183JA16#
			10pF	±5%	GCM21A5C2E100JX01#				22000pF	±5%	GCM21B5C1H223JA16#
			12pF	±5%	GCM21A5C2E120JX01#	1.45mm	630Vdc	COG	680pF	±5%	GCM21B5C2J681JX03#
			15pF	±5%	GCM21A5C2E150JX01#				820pF	±5%	GCM21B5C2J821JX03#
			18pF	±5%	GCM21A5C2E180JX01#				1000pF	±5%	GCM21B5C2J102JX03#
			22pF	±5%	GCM21A5C2E220JX01#				1200pF	±5%	GCM21B5C2J122JX03#
			27pF	±5%	GCM21A5C2E270JX01#	250Vdc	COG	U2J	3300pF	±5%	GCM21B5C2E332JX01#
			33pF	±5%	GCM21A5C2E330JX01#				3900pF	±5%	GCM21B5C2E392JX01#
			39pF	±5%	GCM21A5C2E390JX01#				4700pF	±5%	GCM21B5C2E472JX01#
			47pF	±5%	GCM21A5C2E470JX01#				2700pF	±5%	GCM21B7U2E272JX03#
			56pF	±5%	GCM21A5C2E560JX01#				3300pF	±5%	GCM21B7U2E332JX03#
			68pF	±5%	GCM21A5C2E680JX01#				3900pF	±5%	GCM21B7U2E392JX03#
			82pF	±5%	GCM21A5C2E820JX01#				4700pF	±5%	GCM21B7U2E472JX03#
			100pF	±5%	GCM21A5C2E101JX01#				5600pF	±5%	GCM21B7U2E562JX03#
			120pF	±5%	GCM21A5C2E121JX01#	0.95mm	100Vdc	COG	3900pF	±5%	GCM3195C2A392JA16#
			150pF	±5%	GCM21A5C2E151JX01#				4700pF	±5%	GCM3195C2A472JA16#
			180pF	±5%	GCM21A5C2E181JX01#				5600pF	±5%	GCM3195C2A562JA16#
			220pF	±5%	GCM21A5C2E221JX01#				6800pF	±5%	GCM3195C2A682JA16#
			270pF	±5%	GCM21A5C2E271JX01#				8200pF	±5%	GCM3195C2A822JA16#
			330pF	±5%	GCM21A5C2E331JX01#				10000pF	±5%	GCM3195C2A103JA16#
		U2J	390pF	±5%	GCM21A5C2E391JX01#	80Vdc	COG	U2J	33000pF	±5%	GCM3195C1K333JA16#
			470pF	±5%	GCM21A5C2E471JX01#				2700pF	±5%	GCM31B7U2E272JX03#
			560pF	±5%	GCM21A5C2E561JX01#				3300pF	±5%	GCM31B7U2E332JX03#
			680pF	±5%	GCM21A5C2E681JX01#				3900pF	±5%	GCM31B7U2E392JX03#
			820pF	±5%	GCM21A5C2E821JX01#				4700pF	±5%	GCM31B7U2E472JX03#
			1000pF	±5%	GCM21A5C2E102JX01#				5600pF	±5%	GCM31B7U2E562JX03#
			1200pF	±5%	GCM21A5C2E122JX01#	1.0mm	1000Vdc	COG	10pF	±5%	GCM31A5C3A100JX01#
			1500pF	±5%	GCM21A5C2E152JX01#				12pF	±5%	GCM31A5C3A120JX01#
			1800pF	±5%	GCM21A5C2E182JX01#				15pF	±5%	GCM31A5C3A150JX01#
			2200pF	±5%	GCM21A5C2E222JX01#				18pF	±5%	GCM31A5C3A180JX01#
			2700pF	±5%	GCM21A5C2E272JX01#				22pF	±5%	GCM31A5C3A220JX01#
			100pF	±5%	GCM21A7U2E101JX01#				27pF	±5%	GCM31A5C3A270JX01#
			120pF	±5%	GCM21A7U2E121JX01#				33pF	±5%	GCM31A5C3A330JX01#

Part number # indicates the package specification code.

GCM Series Temperature Compensating Type Part Number List

(→ 3.2×1.6mm)

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.0mm	1000Vdc	COG	39pF	±5%	GCM31A5C3A390JX01#
			47pF	±5%	GCM31A5C3A470JX01#
			56pF	±5%	GCM31A5C3A560JX01#
			68pF	±5%	GCM31A5C3A680JX01#
			82pF	±5%	GCM31A5C3A820JX01#
			100pF	±5%	GCM31A5C3A101JX01#
			120pF	±5%	GCM31A5C3A121JX01#
			150pF	±5%	GCM31A5C3A151JX01#
			180pF	±5%	GCM31A5C3A181JX01#
			220pF	±5%	GCM31A5C3A221JX01#
			270pF	±5%	GCM31A5C3A271JX01#
			330pF	±5%	GCM31A5C3A331JX01#
			390pF	±5%	GCM31A5C3A391JX01#
			470pF	±5%	GCM31A5C3A471JX01#
		U2J	10pF	±5%	GCM31A7U3A100JX01#
			12pF	±5%	GCM31A7U3A120JX01#
			15pF	±5%	GCM31A7U3A150JX01#
			18pF	±5%	GCM31A7U3A180JX01#
			22pF	±5%	GCM31A7U3A220JX01#
			27pF	±5%	GCM31A7U3A270JX01#
			33pF	±5%	GCM31A7U3A330JX01#
			39pF	±5%	GCM31A7U3A390JX01#
			47pF	±5%	GCM31A7U3A470JX01#
			56pF	±5%	GCM31A7U3A560JX01#
			68pF	±5%	GCM31A7U3A680JX01#
			82pF	±5%	GCM31A7U3A820JX01#
			100pF	±5%	GCM31A7U3A101JX01#
			120pF	±5%	GCM31A7U3A121JX01#
			150pF	±5%	GCM31A7U3A151JX01#
			180pF	±5%	GCM31A7U3A181JX01#
			220pF	±5%	GCM31A7U3A221JX01#
			270pF	±5%	GCM31A7U3A271JX01#
			330pF	±5%	GCM31A7U3A331JX01#
		630Vdc	10pF	±5%	GCM31A5C2J100JX01#
			12pF	±5%	GCM31A5C2J120JX01#
			15pF	±5%	GCM31A5C2J150JX01#
			18pF	±5%	GCM31A5C2J180JX01#
			22pF	±5%	GCM31A5C2J220JX01#
			27pF	±5%	GCM31A5C2J270JX01#
			33pF	±5%	GCM31A5C2J330JX01#
			39pF	±5%	GCM31A5C2J390JX01#
			47pF	±5%	GCM31A5C2J470JX01#
			56pF	±5%	GCM31A5C2J560JX01#
			68pF	±5%	GCM31A5C2J680JX01#
			82pF	±5%	GCM31A5C2J820JX01#
			100pF	±5%	GCM31A5C2J101JX01#
			120pF	±5%	GCM31A5C2J121JX01#
			150pF	±5%	GCM31A5C2J151JX01#
			180pF	±5%	GCM31A5C2J181JX01#
			220pF	±5%	GCM31A5C2J221JX01#
			270pF	±5%	GCM31A5C2J271JX01#
			330pF	±5%	GCM31A5C2J331JX01#
			390pF	±5%	GCM31A5C2J391JX01#
			470pF	±5%	GCM31A5C2J471JX01#

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.0mm	630Vdc	COG	560pF	±5%	GCM31A5C2J561JX01#
			680pF	±5%	GCM31A5C2J681JX01#
			820pF	±5%	GCM31A5C2J821JX01#
			1000pF	±5%	GCM31A5C2J102JX01#
			1200pF	±5%	GCM31A5C2J122JX01#
			1500pF	±5%	GCM31A5C2J152JX01#
			1800pF	±5%	GCM31A5C2J182JX01#
			U2J	10pF	±5%
			12pF	±5%	GCM31A7U2J100JX01#
			15pF	±5%	GCM31A7U2J120JX01#
			18pF	±5%	GCM31A7U2J150JX01#
			22pF	±5%	GCM31A7U2J220JX01#
			27pF	±5%	GCM31A7U2J270JX01#
			33pF	±5%	GCM31A7U2J330JX01#
			39pF	±5%	GCM31A7U2J390JX01#
			47pF	±5%	GCM31A7U2J470JX01#
			56pF	±5%	GCM31A7U2J560JX01#
			68pF	±5%	GCM31A7U2J680JX01#
			82pF	±5%	GCM31A7U2J820JX01#
			100pF	±5%	GCM31A7U2J101JX01#
			120pF	±5%	GCM31A7U2J121JX01#
			150pF	±5%	GCM31A7U2J151JX01#
			180pF	±5%	GCM31A7U2J181JX01#
			220pF	±5%	GCM31A7U2J221JX01#
			270pF	±5%	GCM31A7U2J271JX01#
			330pF	±5%	GCM31A7U2J331JX01#
			390pF	±5%	GCM31A7U2J391JX01#
			470pF	±5%	GCM31A7U2J471JX01#
		250Vdc	10pF	±5%	GCM31A5C2E100JX01#
			12pF	±5%	GCM31A5C2E120JX01#
			15pF	±5%	GCM31A5C2E150JX01#
			18pF	±5%	GCM31A5C2E180JX01#
			22pF	±5%	GCM31A5C2E220JX01#
			27pF	±5%	GCM31A5C2E270JX01#
			33pF	±5%	GCM31A5C2E330JX01#
			39pF	±5%	GCM31A5C2E390JX01#
			47pF	±5%	GCM31A5C2E470JX01#
			56pF	±5%	GCM31A5C2E560JX01#
			68pF	±5%	GCM31A5C2E680JX01#
			82pF	±5%	GCM31A5C2E820JX01#
			100pF	±5%	GCM31A5C2E101JX01#
			120pF	±5%	GCM31A5C2E121JX01#
			150pF	±5%	GCM31A5C2E151JX01#
			180pF	±5%	GCM31A5C2E181JX01#
			220pF	±5%	GCM31A5C2E221JX01#
			270pF	±5%	GCM31A5C2E271JX01#

Part number # indicates the package specification code.

GCM Series Temperature Compensating Type Power-train AEC-Q200 Part Number List

(→ 3.2×1.6mm)

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.0mm	250Vdc	COG	330pF	±5%	GCM31A5C2E331JX01#
			390pF	±5%	GCM31A5C2E391JX01#
			470pF	±5%	GCM31A5C2E471JX01#
			560pF	±5%	GCM31A5C2E561JX01#
			680pF	±5%	GCM31A5C2E681JX01#
			820pF	±5%	GCM31A5C2E821JX01#
			1000pF	±5%	GCM31A5C2E102JX01#
			1200pF	±5%	GCM31A5C2E122JX01#
			1500pF	±5%	GCM31A5C2E152JX01#
			1800pF	±5%	GCM31A5C2E182JX01#
			2200pF	±5%	GCM31A5C2E222JX01#
			2700pF	±5%	GCM31A5C2E272JX01#
			3300pF	±5%	GCM31A5C2E332JX01#
			3900pF	±5%	GCM31A5C2E392JX01#
			4700pF	±5%	GCM31A5C2E472JX01#
			5600pF	±5%	GCM31A5C2E562JX01#
			6800pF	±5%	GCM31A5C2E682JX01#
		U2J	2700pF	±5%	GCM31A7U2E272JX01#
			3300pF	±5%	GCM31A7U2E332JX01#
			3900pF	±5%	GCM31A7U2E392JX01#
			4700pF	±5%	GCM31A7U2E472JX01#
			5600pF	±5%	GCM31A7U2E562JX01#
1.25mm	1000Vdc	COG	560pF	±5%	GCM31B5C3A561JX01#
			680pF	±5%	GCM31B5C3A681JX01#
		U2J	390pF	±5%	GCM31B7U3A391JX01#
			470pF	±5%	GCM31B7U3A471JX01#
			560pF	±5%	GCM31B7U3A561JX01#
			680pF	±5%	GCM31B7U3A681JX01#
		630Vdc	2200pF	±5%	GCM31B5C2J222JX01#
			2700pF	±5%	GCM31B5C2J272JX01#
			2700pF	±5%	GCM31B7U2J272JX01#
		250Vdc	8200pF	±5%	GCM31B5C2E822JX01#
			10000pF	±5%	GCM31B5C2E103JX01#
			12000pF	±5%	GCM31B5C2E123JX01#
			6800pF	±5%	GCM31B7U2E682JX01#
			8200pF	±5%	GCM31B7U2E822JX01#
1.8mm	1000Vdc	COG	820pF	±5%	GCM31C5C3A821JX03#
			1000pF	±5%	GCM31C5C3A102JX03#
		U2J	820pF	±5%	GCM31C7U3A821JX03#
			1000pF	±5%	GCM31C7U3A102JX03#
		630Vdc	3300pF	±5%	GCM31C5C2J332JX03#
			3900pF	±5%	GCM31C7U2J392JX03#
			4700pF	±5%	GCM31C7U2J472JX03#
		250Vdc	15000pF	±5%	GCM31C5C2E153JX03#
			15000pF	±5%	GCM31C5C2E153JX03#

3.2×2.5mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.0mm	630Vdc	U2J	1200pF	±5%	GCM32A7U2J122JX01#
			1500pF	±5%	GCM32A7U2J152JX01#
			1800pF	±5%	GCM32A7U2J182JX01#

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.0mm	630Vdc	U2J	2200pF	±5%	GCM32A7U2J222JX01#
			3600pF	±5%	GCM32B7U3A122JX01#
1.25mm	1000Vdc	U2J	1200pF	±5%	GCM32B7U2J562JX01#
			1500pF	±5%	GCM32Q7U3A152JX01#
1.5mm	1000Vdc	U2J	6800pF	±5%	GCM32Q7U2J682JX01#
			8200pF	±5%	GCM32D7U3A182JX01#
2.0mm	1000Vdc	U2J	1800pF	±5%	GCM32D7U3A222JX01#
			2200pF	±5%	GCM32D7U2J822JX01#
2.0mm	630Vdc	U2J	8200pF	±5%	GCM32D7U2J103JX01#
			10000pF	±5%	GCM32D7U2J223JX01#

4.5×3.2mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.5mm	1000Vdc	U2J	2700pF	±5%	GCM43Q7U3A272JX01#
			3300pF	±5%	GCM43Q7U3A332JX01#
			6300pF	±5%	GCM43Q7U2J123JX01#
2.0mm	1000Vdc	U2J	3900pF	±5%	GCM43D7U3A392JX01#
			4700pF	±5%	GCM43D7U3A472JX01#
	630Vdc	U2J	15000pF	±5%	GCM43D7U2J153JX01#
			18000pF	±5%	GCM43D7U2J183JX01#
			22000pF	±5%	GCM43D7U2J223JX01#

5.7×5.0mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.5mm	1000Vdc	U2J	5600pF	±5%	GCM55Q7U3A562JX01#
			6800pF	±5%	GCM55Q7U3A682JX01#
			6300pF	±5%	GCM55Q7U2J273JX01#
2.0mm	1000Vdc	U2J	8200pF	±5%	GCM55D7U3A822JX01#
			10000pF	±5%	GCM55D7U3A103JX01#
			33000pF	±5%	GCM55D7U2J333JX01#
2.0mm	630Vdc	U2J	39000pF	±5%	GCM55D7U2J393JX01#
			47000pF	±5%	GCM55D7U2J473JX01#
			47000pF	±5%	GCM55D7U2J473JX01#

Part number # indicates the package specification code.

GCM Series High Dielectric Constant Type Part Number List

0.6×0.3mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.33mm	25Vdc	X7R	100pF	±10%	GCM033R71E101KA03#
			150pF	±10%	GCM033R71E151KA03#
			220pF	±10%	GCM033R71E221KA03#
			330pF	±10%	GCM033R71E331KA03#
			470pF	±10%	GCM033R71E471KA03#
			680pF	±10%	GCM033R71E681KA03#
			1000pF	±10%	GCM033R71E102KA03#
			1500pF	±10%	GCM033R71E152KA03#
			2200pF	±10%	GCM033R71E222KE02#
			3300pF	±10%	GCM033R71E332KE02#
			330pF	±10%	GCM033R71C331KA03#
			680pF	±10%	GCM033R71C681KA03#
			2200pF	±10%	GCM033R71C222KA55#
			3300pF	±10%	GCM033R71C332KA55#
			4700pF	±10%	GCM033R71A472KA03#
			6800pF	±10%	GCM033R71A682KA03#
			10000pF	±10%	GCM033R71A103KA03#

1.0×0.5mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.55mm	100Vdc	X7R	220pF	±10%	GCM155R72A221KA37#
			330pF	±10%	GCM155R72A331KA37#
			470pF	±10%	GCM155R72A471KA37#
			680pF	±10%	GCM155R72A681KA37#
			1000pF	±10%	GCM155R72A102KA37#
			1500pF	±10%	GCM155R72A152KA37#
			2200pF	±10%	GCM155R72A222KA37#
			3300pF	±10%	GCM155R72A332KA37#
			4700pF	±10%	GCM155R72A472KA37#
			33000pF	±10%	GCM155L8EH333KE07#
			47000pF	±10%	GCM155L8EH473KE07#
			68000pF	±10%	GCM155L8EH683KE07#
			0.10µF	±10%	GCM155L8EH104KE07#
			220pF	±10%	GCM155R71H221KA37#
			330pF	±10%	GCM155R71H331KA37#
			470pF	±10%	GCM155R71H471KA37#
			680pF	±10%	GCM155R71H681KA37#
			1000pF	±10%	GCM155R71H102KA37#
			1500pF	±10%	GCM155R71H152KA37#
			2200pF	±10%	GCM155R71H222KA37#
			3300pF	±10%	GCM155R71H332KA37#
			4700pF	±10%	GCM155R71H472KA37#
			6800pF	±10%	GCM155R71H682KA55#
			10000pF	±10%	GCM155R71H103KA55#
			15000pF	±10%	GCM155R71H153KA55#
			22000pF	±10%	GCM155R71H223KA55#
			33000pF	±10%	GCM155R71H333KE02#
			47000pF	±10%	GCM155R71H473KE02#
			68000pF	±10%	GCM155R71H683KE02#
			0.10µF	±10%	GCM155R71H104KE02#

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.55mm	25Vdc	X8L	0.10µF	±10%	GCM155L81E104KE02#
			10000pF	±10%	GCM155R71E103KA37#
			15000pF	±10%	GCM155R71E153KA55#
			22000pF	±10%	GCM155R71E223KA55#
			33000pF	±10%	GCM155R71E333KA55#
			47000pF	±10%	GCM155R71E473KA55#
			33000pF	±10%	GCM155R71C333KA37#
			47000pF	±10%	GCM155R71C473KA37#
			68000pF	±10%	GCM155R71C683KA55#
			0.10µF	±10%	GCM155R71C104KA55#
			0.15µF	±10%	GCM155R71C154KE02#
			0.22µF	±10%	GCM155R71C224KE02#
			0.47µF	±10%	GCM155C71A474KE36#
			0.68µF	±10%	GCM155C71A684KE38#
			1.0µF	±10%	GCM155C71A105KE38#
0.6mm	10Vdc	X7S	0.47µF	±10%	GCM155C71A474KE36#
0.7mm	10Vdc	X7S	0.68µF	±10%	GCM155C71A684KE38#
			1.0µF	±10%	GCM155C71A105KE38#

1.6×0.8mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.9mm	100Vdc	X7R	1000pF	±10%	GCM188R72A102KA37#
			1500pF	±10%	GCM188R72A152KA37#
			2200pF	±10%	GCM188R72A222KA37#
			3300pF	±10%	GCM188R72A332KA37#
			4700pF	±10%	GCM188R72A472KA37#
			6800pF	±10%	GCM188R72A682KA37#
			10000pF	±10%	GCM188R72A103KA37#
			15000pF	±10%	GCM188R72A153KA37#
			22000pF	±10%	GCM188R72A223KA37#
			0.22µF	±10%	GCM188R71H224KA64#
			0.22µF	±10%	GCM188R71E224KA55#
			0.47µF	±10%	GCM188R71E474KA64#
			1.0µF	±10%	GCM188R71E105KA64#
			0.33µF	±10%	GCM188R71C334KA37#
			0.47µF	±10%	GCM188R71C474KA55#
			1.0µF	±10%	GCM188R71C105KA64#
16Vdc	X7R	2.2µF	±10%	GCM188R70J225KE22#	
16Vdc	X7R	2.2µF	±10%	GCM188R70J225KE22#	

2.0×1.25mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
0.7mm	100Vdc	X7R	6800pF	±10%	GCM216R72A682KA37#
			10000pF	±10%	GCM216R72A103KA37#
			15000pF	±10%	GCM216R72A153KA37#
			22000pF	±10%	GCM216R72A223KA37#
			33000pF	±10%	GCM216R72A333KA37#
			47000pF	±10%	GCM219R72A333KA37#
			50Vdc	±10%	GCM219R71H334KA55#
			25Vdc	±10%	GCM219R71E474KA55#
			16Vdc	±10%	GCM219R71C684KA37#
			1.0µF	±10%	GCM219R71C105KA37#
			47000pF	±10%	GCM21BR72A473KA37#
			68000pF	±10%	GCM21BR72A683KA37#
			0.10µF	±10%	GCM21BR72A104KA37#
1.4mm	100Vdc	X7R	47000pF	±10%	GCM21BR72A473KA37#

Part number # indicates the package specification code.

GCM Series High Dielectric Constant Type Part Number List

(→ 2.0×1.25mm)

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.4mm	50Vdc	X7R	0.22μF	±10%	GCM21BR71H224KA37#
			0.47μF	±10%	GCM21BR71H474KA55#
			1.0μF	±10%	GCM21BR71H105KA03#
35Vdc	X8L	2.2μF	±10%	GCM21BL8EG225KE07#	
		X7R	0.68μF	±10%	GCM21BR71YA684KA55#
			1.0μF	±10%	GCM21BR71YA105KA55#
			1.5μF	±10%	GCM21BR71YA155KA54#
		X7S	2.2μF	±10%	GCM21BC71YA225KE02#
25Vdc	X8L	1.5μF	±10%	GCM21BL8EF155KA07#	
		X7R	0.15μF	±10%	GCM21BR71E154KA37#
	X7R	0.22μF	±10%	GCM21BR71E224KA37#	
		0.33μF	±10%	GCM21BR71E334KA37#	
		0.68μF	±10%	GCM21BR71E684KA55#	
		1.0μF	±10%	GCM21BR71E105KA56#	
		1.5μF	±10%	GCM21BR71E155KA54#	
		2.2μF	±10%	GCM21BR71E225KA73#	
	X7R	2.2μF	±10%	GCM21BR71C225KA64#	
		4.7μF	±10%	GCM21BR71C475KA73#	
10Vdc	X7R	2.2μF	±10%	GCM21BR71A225KA37#	
		10μF	±10%	GCM21BR71A106KE22#	
	X7S	4.7μF	±10%	GCM21BC71A475KA73#	
6.3Vdc	X7R	10μF	±10%	GCM21BR70J106KE22#	
1.45mm	100Vdc	X7S	1.0μF	±10%	GCM21BC72A105KE36#
	35Vdc	X8L	4.7μF	±10%	GCM21BL8EG475KE08#
		X7S	4.7μF	±10%	GCM21BC71A475KE36#
	25Vdc	X8L	4.7μF	±10%	GCM21BL8EF475KE08#
		X7S	4.7μF	±10%	GCM21BC71E475KE36#
	16Vdc	X7S	10μF	±10%	GCM21BC71C106KE36#

3.2×2.5mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
2.2mm	100Vdc	X8L	4.7μF	±10%	GCM32DL8EL475KE07#
			X7S	4.7μF	±10% GCM32DC72A475KE02#
			16Vdc	X7R	10μF ±10% GCM32DR71C106KA37#
2.7mm	50Vdc	X8L	10μF	±10%	GCM32EL8EH106KA07#
			X7R	4.7μF	±10% GCM32ER71H475KA55#
			X7S	10μF	±10% GCM32EC71H106KA03#
35Vdc	X7S	10μF	±10%	GCM32EC7YA106KA03#	
		25Vdc	X7R	10μF	±10% GCM32ER71E106KA57#
	16Vdc	X7R	22μF	±20%	GCM32ER71C226ME19#
		10Vdc	X7R	22μF	±20% GCM32ER71A226ME12#
	6.3Vdc	X7R	47μF	±20%	GCM32ER70J476ME19#
		25Vdc	X8L	22μF	±10% GCM32EL8EF226KE08#
			X7S	22μF	±10% GCM32EC71E226KE36#

3.2×1.6mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number
1.25mm	100Vdc	X7R	0.22μF	±10%	GCM31MR72A224KA37#
			0.33μF	±10%	GCM31MR71H334KA37#
			0.47μF	±10%	GCM31MR71H474KA37#
			0.68μF	±10%	GCM31MR71H684KA55#
1.8mm	100Vdc	X8L	2.2μF	±10%	GCM31CL8EL225KE07#
			1.0μF	±10%	GCM31CR72A105KA03#
		X7S	2.2μF	±10%	GCM31CC72A225KE02#
	50Vdc	X7R	2.2μF	±10%	GCM31CR71H225KA55#
		X7S	4.7μF	±10%	GCM31CC71H475KA03#
	25Vdc	X7R	4.7μF	±10%	GCM31CR71E475KA55#
	16Vdc	X7R	4.7μF	±10%	GCM31CR71C475KA37#
		10μF	±10%	GCM31CR71C106KA64#	
	10Vdc	X7R	10μF	±10%	GCM31CR71A106KA64#
		22μF	±10%	GCM31CR71A226KE02#	
	6.3Vdc	X7R	22μF	±20%	GCM31CR70J226ME23#
1.9mm	25Vdc	X7S	10μF	±10%	GCM31CC71E106KA03#

Part number # indicates the package specification code.

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