



**THE DATASHEET OF  
KCA55L7UMF222KH01L**



## Part Numbering

### Safety Standard Certified Multilayer Ceramic Capacitors

(Part Number)

<b>GA3</b>	<b>52</b>	<b>Q</b>	<b>R7</b>	<b>GF</b>	<b>331</b>	<b>K</b>	<b>W31</b>	<b>L</b>
①	②	③	④	⑤	⑥	⑦	⑧	⑨

#### ① Series

Code	Series
<b>EVA</b>	Safety Standard Certified Resin Molding SMD Type Multilayer Ceramic Capacitors for Automotive (Powertrain/Safety)
<b>GA3</b>	Safety Standard Certified Chip Multilayer Ceramic Capacitors for Consumer Electronics & Industrial Equipment
<b>KCA</b>	Safety Standard Certified Metal Terminal Type Multilayer Ceramic Capacitors for Automotive (Powertrain/Safety)

#### ② Dimensions (L×W)

Code	Dimensions (L×W)
<b>42</b>	4.5×2.0mm
<b>43</b>	4.5×3.2mm
<b>52</b>	5.7×2.8mm
<b>55</b>	5.7×5.0mm
<b>86</b>	8.0×6.0mm

As for KCA and EVA series, it represents the dimensions of the product body that does not include the metal terminal.

#### ③ Dimensions (T)

GA3		KCA, EVA	
Code	Dimensions (T)	Code	Dimensions (T)
<b>A</b>	1.0mm	<b>L</b>	2.8mm
<b>D</b>	2.0mm	<b>Q</b>	3.7mm
<b>E</b>	2.5mm	<b>T</b>	4.8mm
<b>Q</b>	1.5mm	<b>W</b>	6.4mm
<b>X</b>	Depends on individual standards.		

#### 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		*2		-10°C			
					Max.		Min.	Max.	Min.	Max.	Min.	
<b>1X</b>	SL	JIS	20°C	20 to 85°C	+350 to -1000ppm/°C	-55 to 125°C	-	-	-	-	-	-
<b>7U</b>	U2J	EIA	25°C	25 to 125°C*1	-750±120ppm/°C	-55 to 125°C	8.78	5.04	6.04	3.47	3.84	2.21
<b>R7</b>	X7R	EIA	25°C	-55 to 125°C	±15%	-55 to 125°C	-	-	-	-	-	-

\*1 Rated Voltage 100Vdc max: 25 to 85°C

\*2 -25°C (Reference Temperature 20°C) / -30°C (Reference Temperature 25°C)

#### ⑤ Certified Type

Code	Rated Voltage	Certified Type
<b>GB</b>	X2 : 250Vac	Type GB
<b>GD</b>	250Vac	Type GD
<b>GF</b>	X1 : 250Vac/Y2 : 250Vac	Type GF
<b>MF</b>	X1 : 250Vac/1000Vdc Y2 : 250Vac/1000Vdc	Type MF
<b>TF</b>	X1 : 305Vac/1500Vdc Y2 : 305Vac/1500Vdc	Type TF

#### ⑥ 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
<b>R50</b>	0.50pF
<b>1R0</b>	1.0pF
<b>100</b>	10pF
<b>103</b>	10000pF

#### ⑦ Capacitance Tolerance

Code	Capacitance Tolerance
<b>J</b>	±5%
<b>K</b>	±10%
<b>M</b>	±20%

#### ⑧ Individual Specification

Expressed by three figures.

#### ⑨ Packaging

Code	Packaging
<b>L</b>	ø180mm Embossed Taping
<b>K</b>	ø330mm Embossed Taping

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

## Looking for pricing, stock, or lifecycle information?

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