

● Part Numbering

Radial Lead Type Monolithic Ceramic Capacitors

(Part Number)

RP	E	R7	1H	104	K	2	M1	A03	A
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩

① Product ID

② Series/Terminal

Product ID	Series/Terminal	
RP	E	Radial Lead Type Monolithic Ceramic Capacitors (DC25V-DC100V)
RH	E/D	Radial Lead Type Monolithic Ceramic Capacitors 150°C max. (for Automotive) (DC50V-DC100V)
RD	E	Radial Lead Type Monolithic Ceramic Capacitors (Only for Commercial Use) (DC25V-DC630V)

③ Temperature Characteristics

Code	Temperature Characteristics	Reference Temperature	Temperature Range	Capacitance Change or Temperature Coefficient	Operating Temperature Range
5C	C0G*	25°C	25 to 125°C	0±30ppm/°C	-55 to 125°C
5G	X8G*	25°C	25 to 150°C	0±30ppm/°C	-55 to 150°C
C7	X7S	25°C	-55 to 125°C	±22%	-55 to 125°C
D7	X7T	25°C	-55 to 125°C	+22, -33%	-55 to 125°C
E4	Z5U	25°C	10 to 85°C	+22, -56%	10 to 85°C
F1	F	20°C	-25 to 85°C	+30, -80%	-25 to 85°C
F5	Y5V	25°C	-30 to 85°C	+22, -82%	-30 to 85°C
L8	X8L	25°C	-55 to 125°C	±15%	-55 to 150°C
			125 to 150°C	+15, -40%	
R7	X7R	25°C	-55 to 125°C	±15%	-55 to 125°C

* Please refer to table for Capacitance change under reference temperature.

• Capacitance change from each temperature

Char.	Nominal Values (ppm/°C) *1	Capacitance Change from 25°C (%)					
		-55°C		-30°C		-10°C	
		Max.	Min.	Max.	Min.	Max.	Min.
C0G	0±30	0.58	-0.24	0.40	-0.17	0.25	-0.11
X8G							

*1: Nominal values denote the temperature coefficient within a range of 25 to 125°C.

④ Rated Voltage


Code	Rated Voltage
1E	DC25V
1H	DC50V
2A	DC100V
2E	DC250V
2W	DC450V
2J	DC630V


⑤ Capacitance

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

⑥ Capacitance Tolerance

Code	Capacitance Tolerance	Temperature Characteristics	Capacitance Step
C	±0.25pF	C0G/X8G	≤5pF : 1pF Step
D	±0.5pF		6 to 9pF : 1pF Step
J	±5%		≥10 : E12 Series
K	±10%	X7S/X7T/X7R/X8L	E6 Series
M	±20%	X7S/X7T/Z5U/X7R	E3 Series
Z	+80%, -20%	F/Y5V	E3 Series

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7 Dimensions (LxW)

Code	Dimensions (LxW)
0	4.0×3.5mm or 5.0×3.5mm (Depends on Part Number List)
1	4.0×3.5mm or 4.5×3.5mm or 5.0×3.5mm (Depends on Part Number List)
2	5.0×3.5mm or 5.5×4.0mm or 5.7×4.5mm (Depends on Part Number List)
3	5.0×4.5mm or 5.5×5.0mm or 6.0×5.5mm (Depends on Part Number List)
4	7.5×5.0mm
5	7.5×7.5mm (DC630V: 7.5×8.0mm)
6	10.0×10.0mm
7	12.5×12.5mm
8	7.5×5.5mm
U	7.7×12.5mm (DC630V: 7.7×13.0mm)
W	5.5×7.5mm

8 Lead Style

Code	Lead Style	Lead Spacing
A1/A2	Straight Long	2.5mm
B1	Straight Long	5.0mm
C1	Straight Long	10.0mm
DB	Straight Taping	2.5mm
E1/E2	Straight Taping	5.0mm
K1	Inside Crimp	5.0mm
M1/M2	Inside Crimp Taping	5.0mm
P1	Outside Crimp	2.5mm
S1/S2	Outside Crimp Taping	2.5mm

Lead distance between reference and bottom planes.

M1, S1 : $H_0 = 16.0 \pm 0.5\text{mm}$

M2, S2 : $H_0 = 20.0 \pm 0.5\text{mm}$

E1 : $H = 17.5 \pm 0.5\text{mm}$

E2 : $H = 20.0 \pm 0.5\text{mm}$

9 Individual Specification Code

Expressed by three figures

10 Packaging

Code	Packaging
A	Ammo Pack
B	Bulk