

Ceramic Capacitors

High Voltage



Features:

- High voltage in a given case size
- High stability and reliability

General Electrical Data

Dielectric	NP0	X7R
Size	MC1206	
Capacitance Tolerance	Cap \leq 5 pF: C (± 0.25 pF) 5 pF < Cap < 10 pF: D (± 0.5 pF) Cap \geq 10 pF: J ($\pm 5\%$)	K ($\pm 10\%$)
Rated Voltage (WVDC)	1 KV	
Q	Cap < 30 pF: Q \geq 400 + 20C Cap \geq 30 pF: Q \geq 1,000	$\leq 2.5\%$
Insulation Resistance at Ur	Ur = 200 to 630 V: ≥ 10 G Ω or R x C ≥ 100 Ω -F whichever is smaller Ur = 1,000 to 3,000 V: ≥ 10 G Ω	
Dielectric Strength	200 to 300 V: $\geq 2 \times$ WVDC 500 to 999 V: $\geq 1.5 \times$ WVDC 1,000 to 3,000 V: $\geq 1.2 \times$ WVDC	
Operating Temperature	-55 to +125°C	
Capacitance Characteristic	± 30 ppm	$\pm 15\%$
Termination	Ni / Sn (Lead-Free Termination)	

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Capacitance Range

NP0 Dielectric 1 KV

Dielectric		NP0
Size		1206
Rated Voltage (V dc)		1,000
Capacitance	1.5 pF (1R5)	B
	2.2 pF (2R2)	B
	3.3 pF (3R3)	B
	4.7 pF (4R7)	B
	6.8 pF (6R8)	B
	10 pF (100)	B
	15 pF (150)	B
	22 pF (220)	B
	33 pF (330)	B
	47 pF (470)	C
	68 pF (680)	C
	100 pF (101)	D
	150 pF (151)	D
	220 pF (221)	G
	330 pF (331)	G
	470 pF (471)	G

X7R Dielectric 1 KV

Dielectric		X7R
Size		1206
Rated Voltage (V dc)		1,000
Capacitance	150 pF (151)	D
	220 pF (221)	D
	330 pF (331)	D
	470 pF (471)	D
	680 pF (681)	D
	1,000 pF (102)	D
	1,500 pF (152)	D
	2,200 pF (222)	D
	3,300 pF (332)	D
	4,700 pF (472)	D
	6,800 pF (682)	D
	0.010 μ F (103)	D

The letter in cell is expressed the symbol of product thickness

Packaging Style and Quantity

Size	Thickness (mm) / Symbol		Paper Tape	Plastic Tape
			7" reel	7" reel
MC1206 (3216)	0.8 \pm 0.1	B	4,000	-
	0.95 \pm 0.1	C	-	3,000
	1.25 \pm 0.1	D	-	3,000
	1.6 \pm 0.2	G	-	2,000

Part Number Table

Description	Part Number
High Voltage Ceramic Capacitors-MC1206	MC1206N1R5C102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N2R2C102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N3R3C102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N4R7C102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N6R8C102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N100J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N150J102CT

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Part Number Table

Description	Part Number
High Voltage Ceramic Capacitors-MC1206	MC1206N220J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N330J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N470J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N680J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N101J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N151J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N221J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N331J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206N471J102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B151K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B221K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B331K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B471K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B681K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B102K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B152K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B222K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B332K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B472K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B682K102CT
High Voltage Ceramic Capacitors-MC1206	MC1206B103K102CT

Part Number Explanation:

MC	1206	B	101	K	102	C	T
Type	Size Inch (mm)	Dielectric	Capacitance	Tolerance	Rated Voltage	Termination	Packaging

Type	: MC = General purpose MC middle and high voltage MC ultra-small size MC
Size	: 1206 = (3216)
Dielectric	: N = NP0, B = X7R
Capacitance	: Two significant digits followed by number of zeros and R is in place of decimal point 100 = 10 pF, 101 = 100 pF, 102 = 1,000 pF, 103 = 0.01 μ F
Tolerance	: C = ± 0.25 pF, D = ± 0.5 pF, J = $\pm 5\%$, K = $\pm 10\%$
Rated voltage	: 102 = 1k V dc
Termination	: C = Cu/Ni/Sn
Packaging	: T = 7" reeled

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