

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

nichicon

CJ series Higher Capacitance, Low ESR



For SMD



Low Impedance



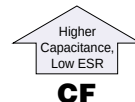
For High Frequency



Anti-Solvent Feature

NEW

- Higher Capacitance, Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- SMD type : Lead free reflow soldering condition at 260°C peak correspondence.
- Adapted to the RoHS directive (2002/95/EC).



Specifications

Item	Performance Characteristics		
Category Temperature Range	−55 ~ +105°C		
Rated Voltage Range	2.5 ~ 16V		
Rated Capacitance Range	39 ~ 2700μF		
Capacitance Tolerance	± 20% at 120Hz, 20°C		
tan δ	Not more than value of Standard ratings at 120Hz, 20°C		
ESR (*1)	Not more than value of Standard ratings at 100kHz, 20°C		
Leakage Current (*2)	Not more than value of Standard ratings. After 2 minute's application of rated voltage. 20°C		
Characteristics of Temperature Impedance Ratio	Z+105°C / Z+20°C ≤ 1.25 (100kHz) Z-55°C / Z+20°C ≤ 1.25		
Endurance	After 2000 hours' application of rated voltage at 105°C, capacitors meet the specified value for life characteristics listed at right.	Capacitance change	Within ± 20% of initial value (* 3)
		tan δ	150% or less of the initial specified value
		ESR (*1)	150% or less of the initial specified value
		Leakage current (*2)	Initial specified value or less
Damp Heat	After 1000 hours' application of rated voltage at 60°C 90%RH, capacitors meet the specified value for life characteristics listed at right.	Capacitance change	Within ± 20% of initial value (* 3)
		tan δ	150% or less of the initial specified value
		ESR (*1)	150% or less of the initial specified value
		Leakage current (*2)	Initial specified value or less
Resistance to Soldering Heat	To comply with recommended conditions for reflow soldering. Pre-heating shall be done at 150 ~ 200°C and for 60 ~ 180 sec. In the case of peak temp, less than 250°C, reflow soldering shall be within two times. In the case of peak temp, less than 260°C, reflow soldering shall be once. Measurement for solder temperature profile shall be made at the capacitor top and the terminal.	Capacitance change	Within ± 10% of initial value (* 3)
		tan δ	130% or less of the initial specified value
		ESR (*1)	130% or less of the initial specified value
		Leakage current (*2)	Initial specified value or less
Marking	Navy blue print on the case top.		

*1 ESR measurements should be made at a point on the terminal nearest where the terminals protrude through the plastic platform.

*2 Conditioning : If there is doubt about the measured result, measurement should be made again after the rated voltage is applied for 120 minutes at the temperature of 105°C.

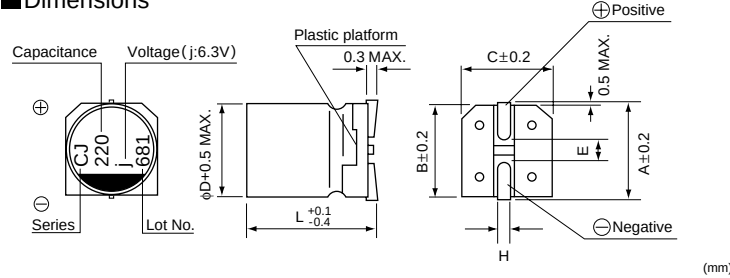
*3 Initial value : The value before test of examination of resistance to soldering.

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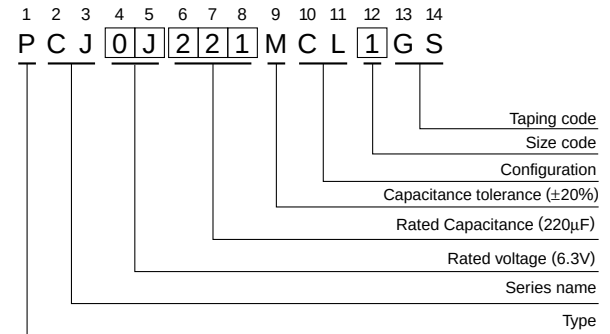
CJ series

■ Dimensions



Size	$\phi 5 \times 6L$	$\phi 6.3 \times 6L$	$\phi 8 \times 7L$	$\phi 8 \times 12L$	$\phi 10 \times 8L$	$\phi 10 \times 10L$	$\phi 10 \times 12.7L$
ϕD	5.0	6.3	8.0	8.0	10.0	10.0	10.0
L	5.9	5.9	6.9	11.9	7.9	9.9	12.6
A	6.0	7.3	9.0	9.0	11.0	11.0	11.0
B	5.3	6.6	8.3	8.3	10.3	10.3	10.3
C	5.3	6.6	8.3	8.3	10.3	10.3	10.3
E	1.2	2.1	3.2	3.2	4.6	4.6	4.6
H	0.5 ~ 0.8	0.5 ~ 0.8	0.8 ~ 1.1	0.8 ~ 1.1	0.8 ~ 1.1	0.8 ~ 1.1	0.8 ~ 1.1

Type numbering system (Example : 6.3V 220 μ F)



Voltage

V	2.5	4	6.3	10	16
Code	e	g	j	A	C

■ Standard ratings

Rated Voltage (V)	Rated Capacitance (μ F)	Case Size $\phi D \times L$ (mm)	$\tan \delta$	Leakage Current (μ A)	ESR (m Ω) (20°C / 100kHz)	Rated ripple (mArms) (105°C / 100kHz)	Code
2.5	180	5 $\times$ 6	0.12	90	21	2500	PCJ0E181MCL1GS
	390	6.3 $\times$ 6	0.12	195	15	3400	PCJ0E391MCL1GS
	560	8 $\times$ 7	0.12	280	13	4000	PCJ0E561MCL1GS
	680	8 $\times$ 7	0.12	340	13	4100	PCJ0E681MCL1GS
	820	8 $\times$ 12	0.12	410	9	5300	PCJ0E821MCL1GS
	1200	10 $\times$ 8	0.12	600	12	4800	PCJ0E122MCL1GS
	1500	8 $\times$ 12	0.12	750	9	5300	PCJ0E152MCL1GS
	2200	10 $\times$ 10	0.12	1100	10	5400	PCJ0E222MCL1GS
4	2700	10 $\times$ 12.7	0.12	1350	9	5800	PCJ0E272MCL1GS
	150	5 $\times$ 6	0.12	120	22	2400	PCJ0G151MCL1GS
	330	6.3 $\times$ 6	0.12	264	15	3300	PCJ0G331MCL1GS
	560	8 $\times$ 7	0.12	448	14	4000	PCJ0G561MCL1GS
	△ 560	8 $\times$ 12	0.12	448	9	5200	PCJ0G561MCL9GS
	1000	10 $\times$ 8	0.12	800	13	4600	PCJ0G102MCL1GS
	1200	8 $\times$ 12	0.12	960	9	5200	PCJ0G122MCL1GS
	■ 1500	8 $\times$ 12	0.12	1200	9	5200	PCJ0G152MCL4GS
6.3	1500	10 $\times$ 10	0.12	1200	10	5000	PCJ0G152MCL1GS
	1800	10 $\times$ 10	0.12	1440	10	5300	PCJ0G182MCL1GS
	2200	10 $\times$ 12.7	0.12	1760	9	5700	PCJ0G222MCL1GS
	100	5 $\times$ 6	0.12	126	24	2300	PCJ0J101MCL1GS
	120	5 $\times$ 6	0.12	151	24	2300	PCJ0J121MCL1GS
	220	6.3 $\times$ 6	0.12	277	15	3200	PCJ0J221MCL1GS
	390	8 $\times$ 7	0.12	491	14	3900	PCJ0J391MCL1GS
	■ 820	8 $\times$ 12	0.12	1033	10	5000	PCJ0J821MCL4GS
10	820	10 $\times$ 8	0.12	1033	13	4500	PCJ0J821MCL1GS
	1500	10 $\times$ 10	0.12	1890	12	4800	PCJ0J152MCL1GS
	1800	10 $\times$ 12.7	0.12	2268	11	5200	PCJ0J182MCL1GS
	68	5 $\times$ 6	0.12	136	28	2100	PCJ1A680MCL1GS
	120	6.3 $\times$ 6	0.12	240	25	2500	PCJ1A121MCL1GS
	270	8 $\times$ 7	0.12	540	21	3200	PCJ1A271MCL1GS
	470	10 $\times$ 8	0.12	940	19	3700	PCJ1A471MCL1GS
	680	10 $\times$ 10	0.12	1360	13	4600	PCJ1A681MCL1GS
16	39	5 $\times$ 6	0.12	124	35	1900	PCJ1C390MCL1GS
	68	6.3 $\times$ 6	0.12	217	28	2300	PCJ1C680MCL1GS
	120	8 $\times$ 7	0.12	384	24	3000	PCJ1C121MCL1GS
	220	10 $\times$ 8	0.12	704	22	3400	PCJ1C221MCL1GS
	330	10 $\times$ 10	0.12	1056	16	4100	PCJ1C331MCL1GS

△ : In this case, [9] will be put at 12th digit of type numbering system.

■ : In this case, [4] will be put at 12th digit of type numbering system.

Design, Specifications are subject to change without notice.

NICHICON CORPORATION

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