

New!
NPCAP™-PSC Series

- Super low ESR, high ripple current capability
- Lower profile than PSA (φ8×8L to φ10×12.5L)
- Rated voltage range : 2.5 to 16V_{dc}
- Nominal capacitance range : 330 to 2,700μF
- Endurance : 2,000 hours at 105°C
- Suitable for DC-DC converters, voltage regulators and decoupling applications for computer motherboards
- RoHS Compliant



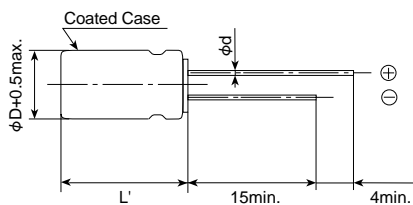
◆ SPECIFICATIONS

Items	Characteristics										
Category											
Temperature Range	-55 to +105°C										
Rated Voltage Range	2.5 to 16V _{dc}										
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)										
Surge Voltage	Rated voltage(V)×1.15 (at 105°C)										
Leakage Current	I=0.2CV or 500μA, whichever is greater.										
*Note	Where, I : Leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V _{dc}) (at 20°C after 2 minutes)										
Dissipation Factor (tanδ)	0.10 max. (at 20°C, 120Hz)										
Low Temperature Characteristics (Max.Impedance Ratio)	Z(-25°C)/Z(+20°C)≤1.15 Z(-55°C)/Z(+20°C)≤1.25 (at 100kHz)										
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 105°C.										
	<table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td>≤±20% of the initial value</td> </tr> <tr> <td>D.F. (tanδ)</td> <td>≤150% of the initial specified value</td> </tr> <tr> <td>ESR</td> <td>≤150% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤The initial specified value</td> </tr> </table>	Appearance	No significant damage	Capacitance change	≤±20% of the initial value	D.F. (tanδ)	≤150% of the initial specified value	ESR	≤150% of the initial specified value	Leakage current	≤The initial specified value
Appearance	No significant damage										
Capacitance change	≤±20% of the initial value										
D.F. (tanδ)	≤150% of the initial specified value										
ESR	≤150% of the initial specified value										
Leakage current	≤The initial specified value										
Bias Humidity Test	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to DC voltage at 60°C, 90 to 95% RH for 1,000 hours.										
	<table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td>≤±20% of the initial value</td> </tr> <tr> <td>D.F. (tanδ)</td> <td>≤150% of the initial specified value</td> </tr> <tr> <td>ESR</td> <td>≤150% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤The initial specified value</td> </tr> </table>	Appearance	No significant damage	Capacitance change	≤±20% of the initial value	D.F. (tanδ)	≤150% of the initial specified value	ESR	≤150% of the initial specified value	Leakage current	≤The initial specified value
Appearance	No significant damage										
Capacitance change	≤±20% of the initial value										
D.F. (tanδ)	≤150% of the initial specified value										
ESR	≤150% of the initial specified value										
Leakage current	≤The initial specified value										
Surge Voltage Test	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltage specified at 105°C for 30 seconds through a protective resistor(R=1kΩ) and discharge for 5 minutes 30 seconds.										
	<table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td>≤±20% of the initial value</td> </tr> <tr> <td>D.F. (tanδ)</td> <td>≤150% of the initial specified value</td> </tr> <tr> <td>ESR</td> <td>≤150% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤The initial specified value</td> </tr> </table>	Appearance	No significant damage	Capacitance change	≤±20% of the initial value	D.F. (tanδ)	≤150% of the initial specified value	ESR	≤150% of the initial specified value	Leakage current	≤The initial specified value
Appearance	No significant damage										
Capacitance change	≤±20% of the initial value										
D.F. (tanδ)	≤150% of the initial specified value										
ESR	≤150% of the initial specified value										
Leakage current	≤The initial specified value										
Failure Rate	1% per 1,000 hours maximum (Confidence level 60% at 105°C)										

*Note : If any doubt arises, measure the leakage current after the following voltage treatment.
Voltage treatment : DC rated voltage is applied to the capacitors for 60 minutes at 105°C.

◆ DIMENSIONS [mm]

- Terminal Code : E



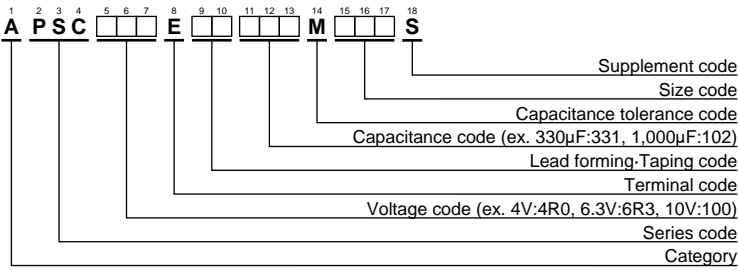
Size code	H08	HB5	JB5	JC5
φD	8.0	8.0	10.0	10.0
L	8.0	11.5	11.5	12.5
φd	0.6	0.8	0.8	0.6
F	3.5	3.5	5.0	5.0
L'	L+1.0max.		L+1.5max.	

◆ MARKING

EX) 2.5V820μF



◆PART NUMBERING SYSTEM



Please refer to "A guide to global code (conductive polymer type)"

◆STANDARD RATINGS

WV(V _{dc})	Cap(μF)	Case size φD×L(mm)	Leakage Current (μA)	ESR (mΩ max/20°C, 100k to 300kHz)	Rated ripple current (mArms/105°C, 100kHz)	Part No.
2.5	560	8×8	500	7	6,100	APSC2R5E□□561MH08S
	820	8×8	500	7	6,100	APSC2R5E□□821MH08S
	1,000	8×11.5	500	7	6,100	APSC2R5E□□102MHB5S
	2,700	10×11.5	1,350	8	5,560	APSC2R5E□□272MJB5S
4	560	8×8	500	7	6,100	APSC4R0E□□561MH08S
	680	8×11.5	544	7	6,100	APSC4R0E□□681MHB5S
	1,000	10×11.5	800	6	6,640	APSC4R0E□□102MJB5S
6.3	470	8×8	592	8	5,700	APSC6R3E□□471MH08S
	820	10×11.5	1,033	7	6,640	APSC6R3E□□821MJB5S
	1,500	10×11.5	1,890	10	5,560	APSC6R3E□□152MJB5S
10	390	8×11.5	780	9	5,650	APSC100E□□391MHB5S
	680	10×11.5	1,360	7	6,100	APSC100E□□681MJB5S
16	330	10×12.5	1,056	10	6,100	APSC160E□□331MJC5S

□□ : Lead forming code / Taping code