



CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

Radial Lead

Upgrade! NPCAP™-PSA Series

- Super low ESR, high temperature resistance and high ripple current capability
- Rated voltage range : 2.5 to 16V_{dc}
- 2000 hours at 105°C
- Suitable for DC-DC converters, voltage regulators and decoupling applications for computer motherboards
- Pb-free design



◆SPECIFICATIONS

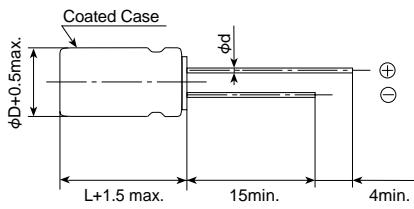
Items	Characteristics											
Category Temperature Range	-55 to +105°C											
Rated Voltage Range	2.5 to 16V _{dc}											
Capacitance Tolerance	±20% (M)	(at 20°C, 120Hz)										
Surge Voltage	Rated voltage×1.15V	(at 105°C)										
Leakage Current *Note	I=0.2CV (max.) Where, I : Leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V _{dc})	(at 20°C after 2 minutes)										
Dissipation Factor (tanδ)	0.08 max.	(at 20°C, 120Hz)										
Low Temperature Characteristics	Max. impedance ratio at 100kHz to the 20°C value $Z(-25^\circ\text{C})/Z(+20^\circ\text{C}) \leq 1.15$ $Z(-55^\circ\text{C})/Z(+20^\circ\text{C}) \leq 1.25$											
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2000 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 measured 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 measured value	D.F. (tanδ)	≤150% of the initial specified value	ESR	≤150% of the initial specified value	Leakage current	≤The initial specified value
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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 1000 hours. <table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td>≤±20% of the initial measured 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 measured value	D.F. (tanδ)	≤150% of the initial specified value	ESR	≤150% of the initial specified value	Leakage current	≤The initial specified value
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Surge Voltage Test	The capacitors shall be subjected to 1000 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 measured 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 measured value	D.F. (tanδ)	≤150% of the initial specified value	ESR	≤150% of the initial specified value	Leakage current	≤The initial specified value
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Leakage current	≤The initial specified value											
Failure Rate	1% per 1000 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 120 minutes at 105°C.

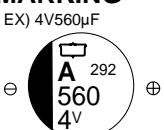
◆DIMENSIONS [mm]

- Terminal Code : E



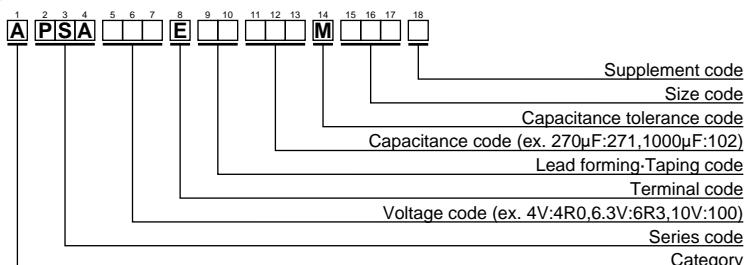
φD	6.3	8	10
φd	0.5	0.8	
L'	L+1.0	L+1.5	
F	2.5	3.5	5

◆MARKING



Upgrade!
NPCAP™-PSA Series

◆PART NUMBERING SYSTEM



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

◆STANDARD RATINGS

WV(Vdc)	Cap(µF)	Case size ϕDXL(mm)	ESR (mΩmax/20°C, 100k to 300kHz)	Rated ripple current (mAmps/105°C, 100kHz)	Part No.
2.5	390	6.3×9.8	20	3160	APSA2R5E□□391MF9JG
	680	8×11.5	7	5580	APSA2R5E□□681MHB5S
	820	8×11.5	7	5580	APSA2R5E□□821MHB5S
	1000	10×11.5	6	5860	APSA2R5E□□102MJB5S
4	270	6.3×9.8	20	3160	APSA4R0E□□271MF9JG
	390	6.3×9.8	24	3300	APSA4R0E□□391MF9JG
	560	8×11.5	7	5580	APSA4R0E□□561MHB5S
	820	10×11.5	6	5860	APSA4R0E□□821MJB5S
6.3	220	6.3×9.8	20	3160	APSA6R3E□□221MF9JG
	330	6.3×9.8	28	3190	APSA6R3E□□331MF9JG
	390	8×11.5	8	5080	APSA6R3E□□391MHB5S
	680	10×11.5	7	5860	APSA6R3E□□681MJB5S
10	47	6.3×9.8	25	2820	APSA100E□□470MF9JG
	68	6.3×9.8	25	2820	APSA100E□□680MF9JG
	100	6.3×9.8	25	2820	APSA100E□□101MF9JG
	150	6.3×9.8	25	2820	APSA100E□□151MF9JG
	270	8×11.5	9	4710	APSA100E□□271MHB5S
	470	10×11.5	8	5650	APSA100E□□471MJB5S
16	100	6.3×9.8	25	2820	APSA160E□□101MF9JG

□□ : Lead forming code and taping code



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помошь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помошь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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