NIPPON CHEMI-CON

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℃
- Suitable for DC-DC converters, voltage regulators and decoupling applications for computer motherboards
- Pb-free design

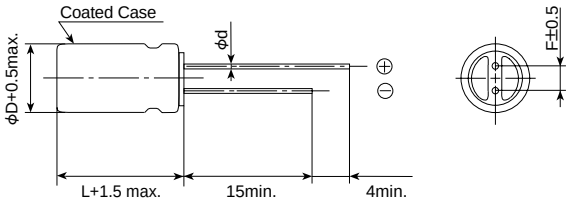
◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	−55 to +105℃
Rated Voltage Range	2.5 to 16V_{dc}
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)
Surge Voltage	Rated voltage×1.15V (at 105℃)
Leakage Current *Note	I=0.2CV (max.) Where, I : Leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V_{dc}) (at 20℃ after 2 minutes)
Dissipation Factor (tanδ)	0.08 max. (at 20℃, 120Hz)
Low Temperature Characteristics	Max. impedance ratio at 100kHz to the 20℃ value Z(−25℃)/Z(+20℃)≦1.15 Z(−55℃)/Z(+20℃)≦1.25
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 2000 hours at 105℃.
	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
Bias Humidity Test	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to DC voltage at 60℃, 90 to 95% RH for 1000 hours.
	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
Surge Voltage Test	The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltage specified at 105℃ for 30 seconds through a protective resistor(R=1kΩ) and discharge for 5 minutes 30 seconds.
	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
Failure Rate	1% per 1000 hours maximum (Confidence level 60% at 105℃)

*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℃.

◆DIMENSIONS [mm]

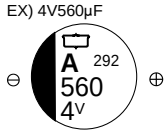
- Terminal Code : E



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

◆MARKING

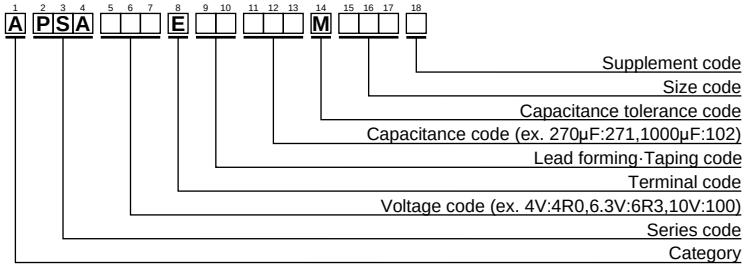
EX) 4V560μF



CAT. No. E1001E

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 φD×L(mm)	ESR (mΩmax/20℃, 100k to 300kHz)	Rated ripple current (mArms/105℃, 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