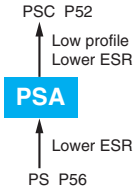
NPCAP™-PSA Series

- Super low ESR, high temperature resistance and high ripple current capability
- Rated voltage range : 2.5 to 16Vdc
- Endurance : 15,000 hours at 105℃
- Suitable for DC-DC converters, voltage regulators and decoupling applications for computer motherboards
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant
- Halogen Free



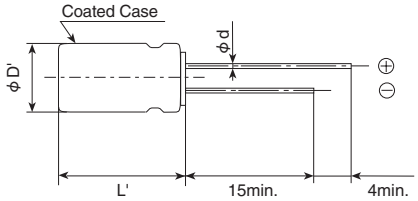
◆SPECIFICATIONS

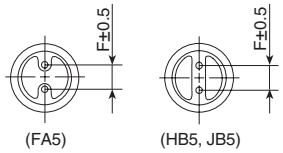
Items	Characteristics	
Category Temperature Range	-55 to +105℃	
Rated Voltage Range	2.5 to 16Vdc	
Capacitance Tolerance	±20% (M)	(at 20℃, 120Hz)
Surge Voltage	Rated voltage×1.15	(at 105℃)
Leakage Current *Note	I=0.2CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (Vdc)	(at 20℃ after 2 minutes)
Dissipation Factor (tan δ)	0.08 max. (FA5 size : 0.12max.)	(at 20℃, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Z(-25℃)/Z(+20℃)≦1.15 Z(-55℃)/Z(+20℃)≦1.25	(at 100kHz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 15,000 hours at 105℃.	
	Appearance	No significant damage
	Capacitance change	≦±20% of the initial value
	D.F. (tan δ)	≦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 1,000 hours.	
	Appearance	No significant damage
	Capacitance change	≦±20% of the initial value
	D.F. (tan δ)	≦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℃ 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 value
	D.F. (tan δ)	≦150% of the initial specified value
	ESR	≦150% of the initial specified value
	Leakage current	≦The initial specified value
Failure Rate	0.5% per 1,000 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





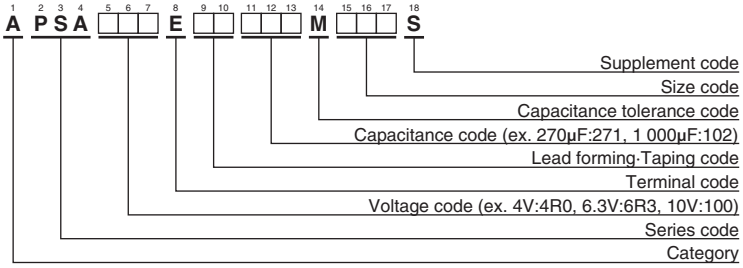
Size code	FA5	HB5	JB5
φD	6.3	8.0	10.0
φd	0.5	0.8	
F	2.5	3.5	5.0
φD'	φD+0.5max		
L'	L+0.3max	L+1.5max	

◆MARKING

EX) 4V560μF

NPCAP™-PSA Series

◆PART NUMBERING SYSTEM



Please refer to "Product code guide (conductive polymer type)"

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	ESR (mΩ max./20℃, 100k to 300kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
2.5	390	6.3×10.5	20	3,160	APSA2R5E□□391MFA5S
	680	8×11.5	7	5,580	APSA2R5E□□681MHB5S
	820	8×11.5	7	5,580	APSA2R5E□□821MHB5S
	1,000	10×11.5	6	5,860	APSA2R5E□□102MJB5S
	1,500	10×11.5	7	5,860	APSA2R5E□□152MJB5S
4	270	6.3×10.5	20	3,160	APSA4R0E□□271MFA5S
	390	6.3×10.5	24	3,300	APSA4R0E□□391MFA5S
	560	8×11.5	7	5,580	APSA4R0E□□561MHB5S
	820	10×11.5	6	5,860	APSA4R0E□□821MJB5S
6.3	220	6.3×10.5	20	3,160	APSA6R3E□□221MFA5S
	330	6.3×10.5	28	3,190	APSA6R3E□□331MFA5S
	390	8×11.5	8	5,080	APSA6R3E□□391MHB5S
	470	8×11.5	7	5,700	APSA6R3E□□471MHB5S
	680	10×11.5	7	5,860	APSA6R3E□□681MJB5S
10	47	6.3×10.5	25	2,820	APSA100E□□470MFA5S
	68	6.3×10.5	25	2,820	APSA100E□□680MFA5S
	100	6.3×10.5	25	2,820	APSA100E□□101MFA5S
	150	6.3×10.5	25	2,820	APSA100E□□151MFA5S
	270	8×11.5	9	4,710	APSA100E□□271MHB5S
	470	10×11.5	8	5,650	APSA100E□□471MJB5S
16	100	6.3×10.5	25	2,820	APSA160E□□101MFA5S

□□ : Enter the appropriate lead forming or taping code.