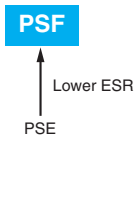
NPCAP™-PSF Series

- Super low ESR, high ripple current capability
- ESR 5mΩmax. (2 to 4Vdc)
- Longer life (20,000 hours at 105℃)
- Rated voltage range : 2 to 16Vdc
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- Halogen Free



◆SPECIFICATIONS

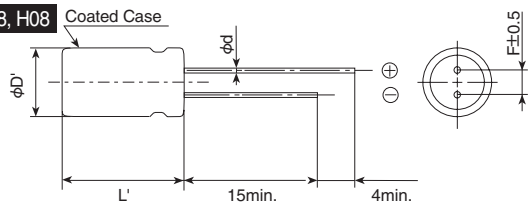
Items	Characteristics					
Category Temperature Range	-55 to +105℃					
Rated Voltage Range	2 to 16Vdc					
Capacitance Tolerance	±20%(M) (at 20℃, 120Hz)					
Leakage Current *Note	Shall not exceed values shown in STANDARD RATINGS. (at 20℃ after 2 minutes)					
Dissipation Factor (tan δ)	0.10 max. (at 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 20,000 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)	≦The initial specified value				
	ESR	2 to 6.3Vdc : ≦The initial specified value				
		16Vdc : ≦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.					
	Rated voltage (Vdc)	2.0	2.5	4.0	6.3	16
	Surge voltage (Vdc)	2.3	2.9	4.6	7.2	18
	Appearance	No significant damage				
	Capacitance change	≦±20% of the initial value				
	D.F. (tan δ)	≦The initial specified value				
	ESR	2 to 6.3Vdc : ≦The initial specified value				
		16Vdc : ≦150% of the initial specified value				
	Leakage current	≦The initial specified value				

*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℃.

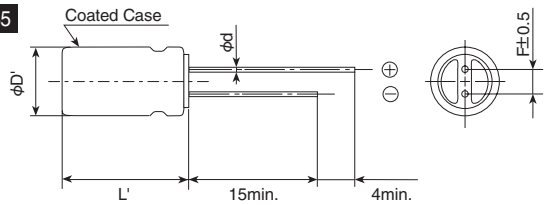
◆DIMENSIONS [mm]

●Terminal Code : E

F05, F08, H08



HB5, JB5

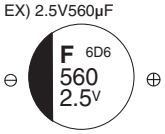


Size code	F05	F08	H08	HB5	JB5
φD	6.3		8.0		10.0
φd	0.45	0.6			
F	2.5		3.5		5.0
φD'	φD+0.5max.				

Note1 : L+1.2max. for 6.3V820μF 1.5max.

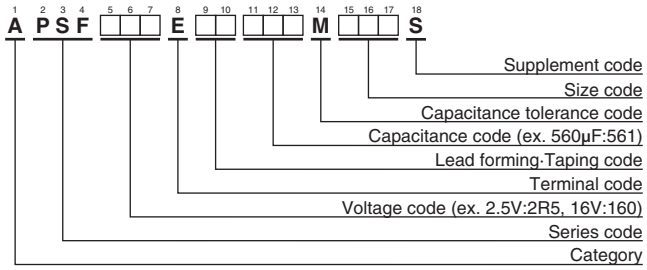
◆MARKING

EX) 2.5V560μF



NPCAP™-PSF 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)	Leakage current (μA max./after 2min.)	ESR (mΩ max./20℃, 100k to 300kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
2	1,000	6.3×8	500	5	5,900	APSF2R0E□□102MF08S
2.5	330	6.3×8	500	5	5,900	APSF2R5E□□331MF08S
	470	6.3×8	500	5	5,900	APSF2R5E□□471MF08S
	560	6.3×8	500	5	5,900	APSF2R5E□□561MF08S
	820	6.3×8	500	5	5,900	APSF2R5E□□821MF08S
	1,200	6.3×8	1,200	5	5,900	APSF2R5E□□122MF08S
	1,600	8×8	800	5	6,100	APSF2R5E□□162MH08S
4	470	6.3×8	500	5	5,900	APSF4R0E□□471MF08S
	560	6.3×8	500	5	5,900	APSF4R0E□□561MF08S
6.3	820	6.3×8	1,030	8	4,700	APSF6R3E□□821MF08S
16	100	6.3×5	500	24	2,490	APSF160E□□101MF05S
	270	8×8	864	10	5,000	APSF160E□□271MH08S
	270	8×11.5	864	11	5,080	APSF160E□□271MHB5S
	330	8×8	1,050	13	4,700	APSF160E□□331MH08S
	470	8×11.5	1,500	11	5,400	APSF160E□□471MHB5S
	470	10×11.5	1,500	10	6,100	APSF160E□□471MJB5S

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

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	120	1k	10k	50k	100k to 500k
Radial lead type	0.10	0.35	0.60	0.80	1.00

■ Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.

■ Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.

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