

Upgrade!

NPCAP™-PSF Series

- Super low ESR, high ripple current capability
- ESR 5mΩ max. (2 to 4V<sub>dc</sub>)
- Longer life (5,000 hours at 105°C)
- ESR after endurance is specified within the initial spec (2 to 4V<sub>dc</sub>)
- Rated voltage range : 2 to 16V<sub>dc</sub>
- RoHS Compliant
- Halogen Free



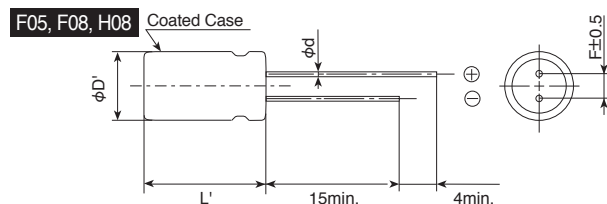
◆ SPECIFICATIONS

Items	Characteristics											
Category												
Temperature Range	-55 to +105°C											
Rated Voltage Range	2 to 16V <sub>dc</sub>											
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)											
Surge Voltage	Rated voltage(V) × 1.15 (at 105°C)											
Leakage Current *Note	Shall not exceed values shown in STANDARD RATINGS. (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 5,000 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>≤ The initial specified value</td> </tr> <tr> <td rowspan="2">ESR</td> <td>2 to 4V<sub>dc</sub> : ≤ The initial specified value</td> </tr> <tr> <td>16V<sub>dc</sub> : ≤ 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)	≤ The initial specified value	ESR	2 to 4V <sub>dc</sub> : ≤ The initial specified value	16V <sub>dc</sub> : ≤ 150% of the initial specified value	Leakage current	≤ The initial specified value
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	16V <sub>dc</sub> : ≤ 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.											
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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.											
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Leakage current	≤ The initial specified value											
Failure Rate	0.5% per 1,000 hours maximum (Confidence level 60% at 105°C)											

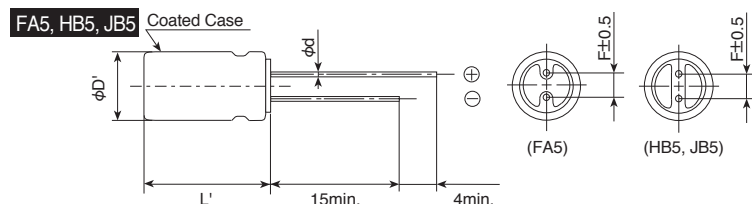
\*Note : If any doubt arises, measure the leakage current after the following voltage treatment.  
Voltage treatment : DC rated voltage is applied to the capacitors for 120 minutes at 105°C.

◆ DIMENSIONS [mm]

● Terminal Code : E

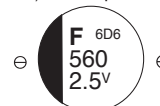


Size code	F05	F08	FA5	H08	HB5	JB5
φD	6.3			8.0		
φd	0.45	0.6	0.5	0.6		
F	2.5		3.5		5.0	
φD'	φD+0.5max.					
L'	L+1.0max.		L+0.3max.		L+1.0max.	

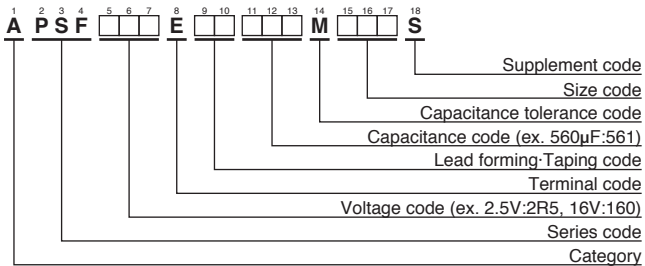


◆ MARKING

EX) 2.5V560μF



◆PART NUMBERING SYSTEM



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

◆STANDARD RATINGS

WV(Vdc)	Cap(μF)	Case size φD×L(mm)	Leakage current (μAmax/after 2min.)	ESR (mΩ max./20°C, 100k to 300kHz)	Rated ripple current (mA rms/105°C, 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
16	100	6.3×5	500	24	2,490	APSF160E□□101MF05S
	100	6.3×10.5	500	25	2,820	APSF160E□□101MFA5S
	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.