

NPCAP™-PSG Series *Upgrade!*

- Super low ESR, high ripple current capability
- Endurance: 15,000 to 20,000 hours at 105°C
- Rated voltage : 16 to 35V_{dc}
- RoHS2 Compliant
- Halogen Free

PSG

↑
Downsized
PSF



◆ SPECIFICATIONS

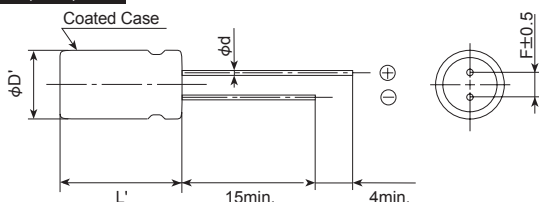
Items	Characteristics																				
Category																					
Temperature Range	-55 to +105°C																				
Rated Voltage	16 to 35V _{dc}																				
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)																				
Leakage Current <small>*Note</small>	I=0.2CV or 500μA, whichever is greater Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)																				
Dissipation Factor (tan δ)	0.12 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 20,000 hours (20 to 35V : 15,000 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. (tan δ)</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 value	D.F. (tan δ)	≤ 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 1,000 hours. <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. (tan δ)</td><td>≤ 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 value	D.F. (tan δ)	≤ 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 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. <table border="1"> <tr><td>Rated voltage (V_{dc})</td><td>16</td><td>20</td><td>25</td><td>35</td></tr> <tr><td>Surge voltage (V_{dc})</td><td>18</td><td>23</td><td>29</td><td>40</td></tr> </table> <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. (tan δ)</td><td>≤ 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>	Rated voltage (V _{dc})	16	20	25	35	Surge voltage (V _{dc})	18	23	29	40	Appearance	No significant damage	Capacitance change	≤ ±20% of the initial value	D.F. (tan δ)	≤ The initial specified value	ESR	≤ 150% of the initial specified value	Leakage current	≤ The initial specified value
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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

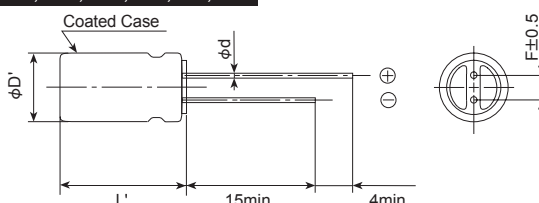
F05, F08, H08



Size code	F05	F08	H08	HB5	H16	H20	JB5	J16	J20
φD	6.3			8.0			10.0		
φd	0.45			0.6					
F	2.5			3.5			5.0		
φD'						φD+0.5max.			
L'	L+1.0max. (Note1)			L+1.5max.					

Note1 : L+1.2 max. for 16V270μF (Rated ripple current 5,080mArms).

HB5, H16, H20, JB5, J16, J20



◆ MARKING

EX) 16V150μF



Mouser Electronics

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