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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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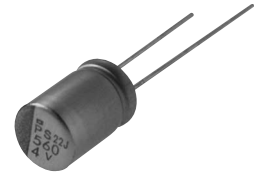
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Upgrade!  
NP CAP™ - **PS** Series

- Super low ESR, high temperature resistance
- Large capacitance & Improved high ripple current capability
- Rated voltage range : 2.5 to 25V<sub>dc</sub> (20/25V newly added)
- 2000 hours at 105°C
- Suitable for DC-DC converters, voltage regulators and decoupling applications  
For computer motherboards

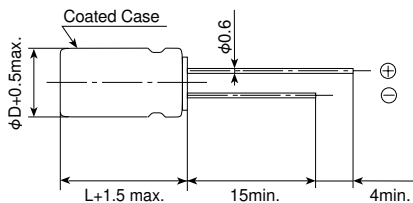


## ◆ SPECIFICATIONS

Items	Characteristics										
<b>Category</b>											
<b>Temperature Range</b>	-55 to +105°C										
<b>Rated Voltage Range</b>	2.5 to 25V <sub>dc</sub>										
<b>Capacitance Tolerance</b>	±20% (M) (at 20°C, 120Hz)										
<b>Surge Voltage</b>	Rated voltage×1.15V (at 105°C)										
<b>Leakage Current</b>	I=0.2CV (max.)										
<b>*Note</b>	Where, I : Leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V <sub>dc</sub> ) (at 20°C after 2 minutes)										
<b>Dissipation Factor (tanδ)</b>	0.12 max. (at 20°C, 120Hz)										
<b>Low Temperature Characteristics</b>	Max. impedance ratio at 100kHz to the 20°C value Z(-25°C)/Z(+20°C) ≤ 1.15 Z(-55°C)/Z(+20°C) ≤ 1.25										
<b>Endurance</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2000 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 measured value</td> </tr> <tr> <td>D.F. (tanδ)</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 measured value	D.F. (tanδ)	≤ 150% of the initial specified value	ESR	≤ 150% of the initial specified value	Leakage current	≤ The initial specified value
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<b>Bias Humidity Test</b>	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 500 hours.										
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<b>Surge Voltage Test</b>	The capacitors shall be subjected to 1000 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										
<b>Failure Rate</b>	1% per 1000 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]



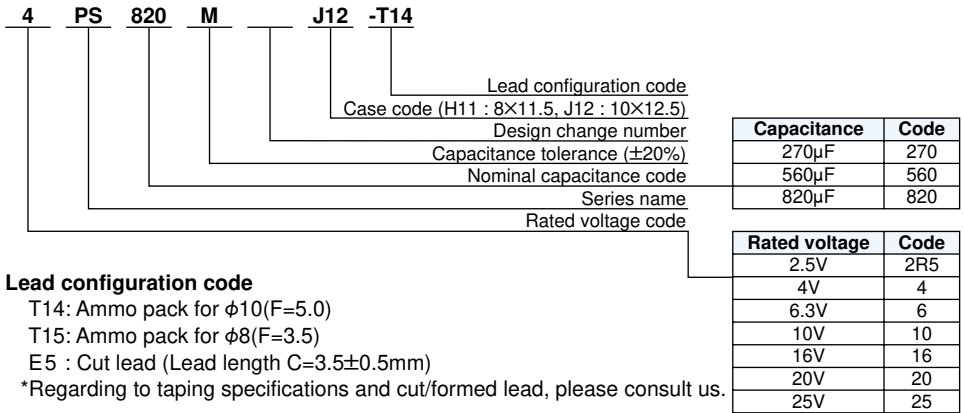
φD	8	10
L	11.5	12.5
F	3.5	5.0

## ◆ MARKING

EX) 4V820μF



### ◆PART NUMBERING SYSTEM



#### Lead configuration code

T14: Ammo pack for φ10(F=5.0)

T15: Ammo pack for φ8(F=3.5)

E5 : Cut lead (Lead length C=3.5±0.5mm)

\*Regarding to taping specifications and cut/formed lead, please consult us.

### ◆STANDARD RATINGS

Case size φD×L(mm)	Rated voltage (V <sub>dc</sub> )	Nominal Capacitance (μF)	ESR (mΩmax./20°C, 100k to 300kHz)	Ripple current (mArms max./ 105°C,100kHz)	Part Number
8×11.5	2.5	680	10	5,230	2R5PS680MH11
	4	560	10	5,230	4PS560MH11
	6.3	390	12	4,770	6PS390MH11
	10	270	14	4,420	10PS270MH11
	16	180	16	4,360	16PS180MH11
	20	100	24	3,320	20PS100MH11
10×12.5	2.5	1,500	8	5,500	2R5PS1500MJ12
	4	820	8	5,500	4PS820MJ12
	6.3	680	10	5,500	6PS680MJ12
	10	470	12	5,300	10PS470MJ12
	16	330	14	5,050	16PS330MJ12
	20	150	20	4,320	20PS150MJ12
	25	100	20	4,320	25PS100MJ12