

## NPCAP™-PSE Series

- Super low ESR, high ripple current capability
- Downsized from PSC series ( $\phi 8 \times 8L$  to  $\phi 6.3 \times 8L$ )
- Endurance is longer life than PSC series (5,000 hours at 105°C)
- ESR after endurance is specified within the initial spec
- Rated voltage range : 2.5 to 6.3Vdc
- RoHS Compliant
- Halogen Free



## ◆ SPECIFICATIONS

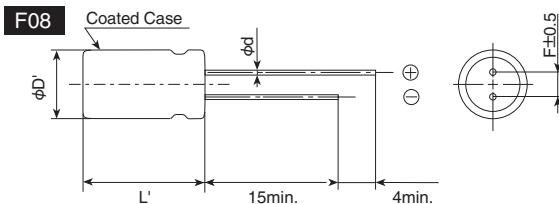
Items	Characteristics	
Category		
Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 6.3Vdc	
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)	
Surge Voltage	Rated voltage(V) $\times 1.15$ (at 105°C)	
Leakage Current	I=0.2CV or 500 $\mu$ A, whichever is greater *Note Where, I : Max. leakage current ( $\mu$ A), C : Nominal capacitance ( $\mu$ F), V : Rated voltage (V) (at 20°C after 2 minutes)	
Dissipation Factor (tan $\delta$ )	0.10 max. (at 20°C, 120Hz)	
Low Temperature Characteristics (Max.Impedance Ratio)	Z(-25°C)/Z(+20°C) $\leq 1.15$ Z(-55°C)/Z(+20°C) $\leq 1.25$ (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. Appearance Capacitance change D.F. (tan $\delta$ ) ESR Leakage current	
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. Appearance Capacitance change D.F. (tan $\delta$ ) ESR Leakage current	
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 ( $R=1k\Omega$ ) and discharge for 5 minutes 30 seconds. Appearance Capacitance change D.F. (tan $\delta$ ) ESR Leakage current	
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]

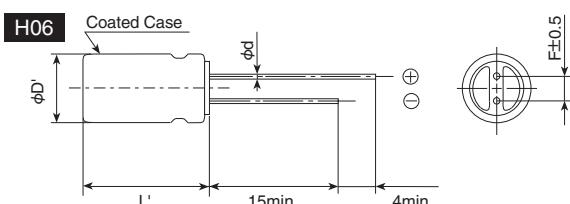
- Terminal Code : E



Size code	F08	H06
$\phi D$	6.3	8.0
$\phi d$	0.6	
F	2.5	3.5
$\phi D'$	$\phi D + 0.5$ max.	
L'	$L + 1.5$ max.	

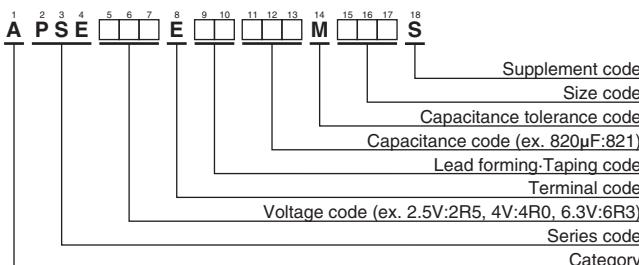
## ◆ MARKING

EX) 2.5V820MF



## NPCAP™ PSE Series

## ◆PART NUMBERING SYSTEM



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

## ◆STANDARD RATINGS

WV(Vdc)	Cap(μF)	Case size φD×L(mm)	ESR (mΩ max./20°C, 100k to 300kHz)	Rated ripple current (mA rms/105°C, 100kHz)	Part No.
2.5	680	8×6	8	4,900	APSE2R5E□□681MH06S
	820	6.3×8	7	5,000	APSE2R5E□□821MF08S
4	560	6.3×8	7	5,000	APSE4R0E□□561MF08S
6.3	470	6.3×8	8	4,700	APSE6R3E□□471MF08S
	560	6.3×8	8	4,700	APSE6R3E□□561MF08S

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