

# NPCAP<sup>™</sup>-**PSE** Series

- •Super low ESR, high ripple current capability
- Downsized from PSC series (φ8×8L to φ6.3×8L)
  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

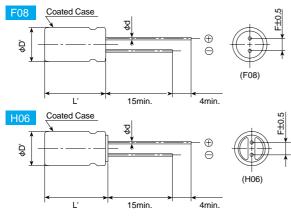
Items	Characteristics						
Category Temperature Range	−55 to +105℃						
Rated Voltage Range	2.5 to 6.3V <sub>dc</sub>						
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)						
Surge Voltage	Rated voltage(V)×1.15		(at 105°C)				
Leakage Current	I=0.2CV or 500μA, whichever is greater						
*Note	Where, I : Max. leakage current ( $\mu$ A), C : Nominal capacitance ( $\mu$ F), V : Rated voltage (V) (at 20°C after 2 minutes)						
Dissipation Factor (tan∂)	0.10 max. (at 20°C, 120Hz)						
Low Temperature	Z(-25°C)/Z(+20°C)≦1.15						
Characteristics	Z(-55°)/Z(+20℃)≦1.25						
(Max.Impedance Ratio)		(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	No significant damage					
	Capacitance change	≦±20% of the initial value					
	D.F. (tanδ)	≦The initial specified value					
	ESR	≦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.						
	Appearance	No significant damage					
	Capacitance change	≦±20% of the initial value					
	D.F. (tanδ)	≦The initial specified value					
	ESR	≦The initial specified value					
	Leakage current	≦The initial specified value					
Surge Voltage Test	est The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltage specified at 105°C for 30						
	through a protective resistor ( $R=1k\Omega$ ) and discharge for 5 minutes 30 seconds.						
	Appearance	No significant damage					
	Capacitance change	≦±20% of the initial value					
	D.F. (tanδ)	≦The initial specified value					
	ESR	≦The initial specified value					
	Leakage current	≦The initial specified value					
Failure Rate	0.5% per 1,000 hours m	aximum (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	
φD	6.3	8.0	
φd	0.6		
F	2.5	3.5	
φ <b>D'</b>	φD+0.5max.		
Ľ	L+1.5max.		

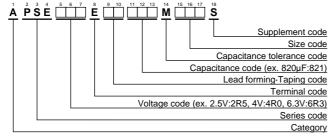








## **♦**PART NUMBERING SYSTEM



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

#### **♦STANDARD RATINGS**

WV(Vdc)	Cap(µF)	Case size ¢D×L(mm)	ESR (mΩ max./20°C, 100k to 300kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
2.5	680	8×6	8	4,900	APSE2R5EDD681MH06S
	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	APSE6R3EDD471MF08S
	560	6.3×8	8	4,700	APSE6R3EDD561MF08S

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