# NPCAP eries

- Super low ESR, high ripple current capability
- Downsized from PSC series ( $\phi$  8×8L to  $\phi$  6.3×8L)
- ●Endurance is longer than PSC series (20,000 hours at 105℃) Rated voltage range : 2.5 to 6.3Vdc
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant
- OHalogen Free

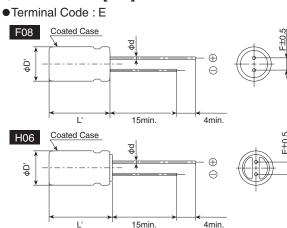
### **♦**SPECIFICATIONS

Items	Characteristics					
Category Temperature Range	-55 to +105℃					
Rated Voltage Range	2.5 to 6.3V₀c					
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 $(\tan \delta)$	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 20,000 hours at 105°C.					
	Appearance	No significant damage				
	Capacitance change	$\leq \pm 20\%$ of the initial value				
	D.F. (tan δ )	$\leq$ 150% of the initial specified value				
	ESR	≦200% 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.					
	Appearance	No significant damage				
	Capacitance change	$\leq \pm 20\%$ of the initial value				
	D.F. (tan δ )	≦The initial specified value				
	ESR	≦The initial specified value				
	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( $R=1k\Omega$ ) and discharge for 5 minutes 30 seconds.					
	Appearance	No significant damage				
	Capacitance change	$\leq \pm 20\%$ of the initial value				
	D.F. (tan δ )	≦The initial specified value				
	ESR	≦The initial specified value				
	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]



Size code	F08	H06	
φD	6.3	8.0	
φd	0.6		
F	2.5	3.5	
φD'	φD+0.5max.		
Ľ	L+1.5max.		



PSE

Longer life

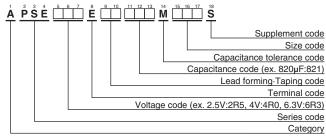
Downsized

PSC P58

CAT. No. E1001Q



## **◆PART NUMBERING SYSTEM**



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

#### **♦STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (µF)	Case size φ D × L(mm)	ESR (mΩ max./20℃, 100k to 300kHz)	Rated ripple current (mArms/105℃, 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

 $\Box$   $\Box$  : Enter the appropriate lead forming or taping code.