

# NPCAP<sup>TM</sup>-PSJ Series

- Super low ESR, high ripple current capability
- Endurance: 2,000 to 5,000 hours at 105°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- Halogen Free





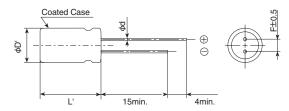
#### **SPECIFICATIONS**

Items	Characteristics				
Category Temperature Range	-55 to +105℃				
Rated Voltage Range	2.5V <sub>dc</sub>				
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)				
Leakage Current *Note	500μA max. (at 20°C after 2 minutes)				
Dissipation Factor (tan $\delta$ )	0.10 max. (at 20°C, 120Hz)				
Low Temperature Characteristics (Max.Impedance Ratio)	$Z(-25^{\circ})/Z(+20^{\circ}) \le 1.15$ $Z(-55^{\circ})/Z(+20^{\circ}) \le 1.25$ (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(φ5.4×8L: 2,000 hours) at 105°C.				
	Appearance	No significant damage			
	Capacitance change	≦±20% of the initial value			
	D.F. (tan $\delta$ )	≦150% of the initial specified value			
	ESR	≦150% 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 $\delta$ )	≦150% of the initial specified value			
	ESR	≦150% of 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=1kΩ) and discharge for 5 minutes 30 seconds.				
	Rated voltage (V <sub>dc</sub> )	2.5			
	Surge voltage (Vdc)	2.9			
	Appearance	No significant damage			
	Capacitance change	$\leq \pm 20\%$ of the initial value			
	D.F. (tan $\delta$ )	≦150% of the initial specified value			
	ESR	≦150% of 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]

## ●Terminal Code : E



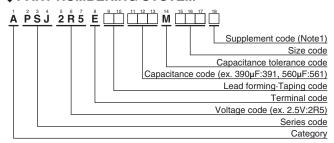
	Size code	E08	F08	
	$\phi$ D	5.4	6.3	
	φd	0.6	0.6	
	F	2.0	2.5	
	$\phi$ D'	φD+0.5max.		
	L'	L+1.5max.		







### **◆PART NUMBERING SYSTEM**



(Note1): PSJ series, 2.5V560μF (ESR 4m Ω max.) has supplement code "J". Terminal and terminal plating are the same as all other in PSJ series.

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℃, 300kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
	390	5.4×8	4	5,600	APSJ2R5E□□391ME08S
2.5	470	5.4×8	4.5	5,200	APSJ2R5E□□471ME08S
2.5	560	6.3×8	4	6,500	APSJ2R5E□□561MF08J
	560	6.3×8	4.5	6,200	APSJ2R5E□□561MF08S

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

### **◆RATED RIPPLE CURRENT MULTIPLIERS**

## Frequency Multipliers

	Frequency(Hz)	120	1k	10k	50k	100k to 500k
Γ	Radial lead type	0.10	0.35	0.60	0.80	1 00