

# 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





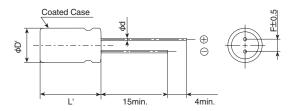
#### **SPECIFICATIONS**

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℃, 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 $20^{\circ}$ C after the rated voltage is applied for 5,000 hours( $\phi 5.4 \times 8L : 2,000 \text{ hours}$ ) at $105^{\circ}$ C.					
	Appearance	No significant damage				
	Capacitance change	≦±20% of the initial value				
	D.F. (tan δ )	≦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℃ after subjecting them to DC voltage at 60℃, 90 to 95% RH for 1,000 hours.					
	Appearance	No significant damage				
	Capacitance change	≦±20% of the initial value				
	D.F. (tan δ )	≦150% of the initial specified value				
	ESR	≦150% of the initial specified value				
	Leakage current	≦The initial specified value				
Surge Voltage Test		ubjected to 1,000 cycles each consisting of charge with the surge voltage specified at 105°C for 30 seconds stor(R=1kΩ) and discharge for 5 minutes 30 seconds.				
	Rated voltage (V <sub>dc</sub> )	2.5				
	Surge voltage (V <sub>dc</sub> )	2.9				
	Appearance	No significant damage				
	Capacitance change	≦±20% of the initial value				
	D.F. (tan δ )	≦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



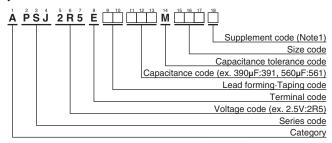
Size code	E08	F08		
φD	5.4	6.3		
φd	0.6	0.6		
F	2.0	2.5		
$\phi$ D'	φD+0.5max.			
L'	L+1.5	max.		







### **◆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

 $<sup>\</sup>square\,\square$  : Enter the appropriate lead forming or taping code.

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

### Frequency Multipliers

Frequency(Hz)	120	1k	10k	50k	100k to 500k
Radial lead type	0.10	0.35	0.60	0.80	1.00