

## NPCAP™-PSL Series

- High capacitance model has been introduced to the product range.
- Super low ESR, high ripple current capability
- Endurance : 5,000 hours at 105°C
- Rated voltage range : 2.5 to 16V<sub>dc</sub>, Capacitance range : 270 to 2,700μF
- RoHS2 Compliant
- Halogen Free
- Specifically designed for Immersion cooling (prohibit use under normal atmosphere).

## ◆ SPECIFICATIONS

Items	Characteristics				
Category					
Temperature Range	-25 to +105℃				
Rated Voltage Range	2.5 to 16V <sub>dc</sub>				
Capacitance Tolerance	±20% (M) (at 20℃ , 120Hz)				
Leakage Current *Note	Shall not exceed values shown in STANDARD RATINGS. (at 20℃ after 2 minutes)				
Dissipation Factor (tan δ )	0.12 max. (at 20℃ , 120Hz)				
Low Temperature Characteristics (Max. Impedance Ratio)	Z(-25℃ ) / Z(+20℃ ) ≤ 1.15 (at 100kHz)				
Endurance (In Immersion Cooling liquid)	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 5,000 hours at 105℃ .				
	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	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltage specified at 105℃ for 30 seconds through a protective resistor(R=1kΩ)and discharge for 5 minutes 30 seconds.				
	Rated voltage (V)	2.5	4	6.3	16
	Surge voltage (V)	2.9	4.6	7.2	18
	Appearance	No significant damage			
	Capacitance change	≤ ±20% of the initial value			
	D.F. (tan δ )	≤ The initial specified value			
	ESR	≤ 150% of the initial specified value			
	Leakage current	≤ The initial specified value			

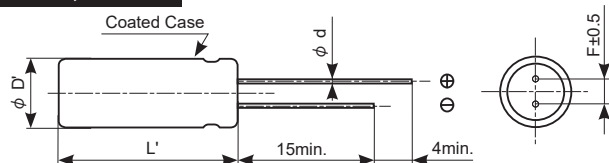
\*Note : If any doubt arises, measure the leakage current after the following voltage treatment.

Voltage treatment : DC rated voltage is applied to the capacitors for 120 minutes at 105°C.

## ◆ DIMENSIONS [mm]

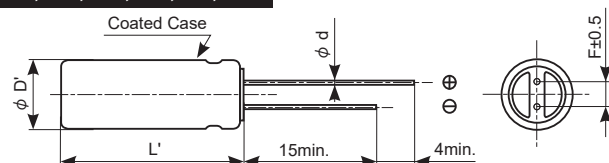
● Terminal Code : E

F08, H08



Size code	F08	H08	HB5	H16	H20	JB5	J16	J20
φ D	6.3			8.0			10.0	
φ d					0.6			
F	2.5			3.5			5.0	
φ D'								
L'	L+1.0 max.					L+1.5 max.		

HB5, H16, H20, JB5, J16, J20



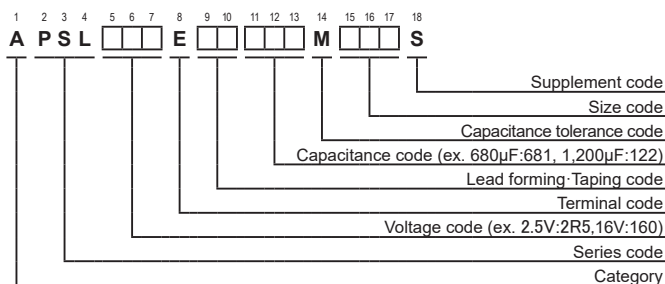
## ◆ MARKING

EX) 16V680μF



## NPCAP™-PSL Series

## ◆ PART NUMBERING SYSTEM



## ◆ STANDARD RATINGS

WV (Vdc)	Cap (µF)	Case size φ D×L(mm)	Leakage current (µA max./after 2min.)	ESR (mΩ max./20°C, 100k to 300kHz)	Rated ripple current (mA rms/ 105°C, 100kHz)	Part No.
2.5	820	6.3 × 8	500	7	6,070	APSL2R5E □□ 821MF08S
	1,600	8 × 8	800	7	6,070	APSL2R5E □□ 162MH08S
4	560	6.3 × 8	500	7	6,070	APSL4R0E □□ 561MF08S
6.3	560	6.3 × 8	705	8	5,670	APSL6R3E □□ 561MF08S
16	270	6.3 × 8	864	10	5,080	APSL160E □□ 271MF08S
	330	6.3 × 8	1,056	10	5,080	APSL160E □□ 331MF08S
	560	8 × 8	1,792	8	5,400	APSL160E □□ 561MH08S
	680	8 × 11.5	2,176	10	6,100	APSL160E □□ 681MHB5S
	1,000	8 × 16	3,200	8	7,000	APSL160E □□ 102MH16S
	1,200	10 × 11.5	3,840	12	5,400	APSL160E □□ 122MJB5S
	1,500	8 × 20	4,800	8	7,500	APSL160E □□ 152MH20S
	1,800	10 × 16	5,760	8	7,700	APSL160E □□ 182MJ16S
	2,700	10 × 20	8,640	8	8,100	APSL160E □□ 272MJ20S

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

## ◆ About specified immersion cooling fluids

Evaluated and confirmed by the following fluids. Please contact us for details.

HydroCarbon	Shell S3X
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## ◆ 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

## ◆ Storage

Products are sealed in a special laminated aluminum bag  
168hour (1week) is maximum storage term after the bag is opened

## ◆ Solvent resistant

Please contact us, If you need to do solvent cleaning