NPCAP™-PSW Series

- Super low ESR, high ripple current capability
- Endurance : 5,000 hours at 105℃
- Rated voltage range : 25Vdc
- RoHS2 Compliant
- Halogen Free

◆ SPECIFICATIONS

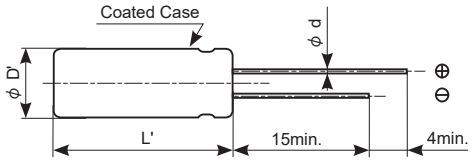
Items	Characteristics
Category Temperature Range	-55 to +105℃
Rated Voltage Range	25Vdc
Capacitance Tolerance	±20% (M) (at 20℃ , 120Hz)
Leakage Current *Note	I=0.2CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 2 minutes)
Dissipation Factor (tan δ)	0.12 max. (at 20℃ , 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Z(-25℃) / Z(+20℃) ≦ 1.15 Z(-55℃) / Z(+20℃) ≦ 1.25 (at 100kHz)
Endurance	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
Bias Humidity Test	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to the DC rated 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): ≦ 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): 25 Surge voltage (V): 29 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
Failure Rate	0.5% per 1,000 hours maximum (Confidence level 60% at 105℃)

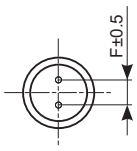
*Note : If any doubt arises, measure the leakage current after the following voltage treatment.
Voltage treatment : DC rated voltage is applied to the capacitors for 120 minutes at 105℃ .

◆ DIMENSIONS [mm]

●Terminal Code : E

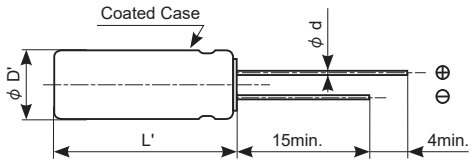
F08, H08

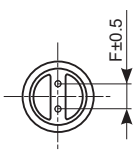




Size code	F08	H08	HB5	JB5
ϕ D	6.3	8.0		10.0
ϕ d	0.6			
F	2.5	3.5		5.0
ϕ D'	ϕ D+0.5max.			
L'	L+1.0max.		L+1.5max.	

HB5, JB5



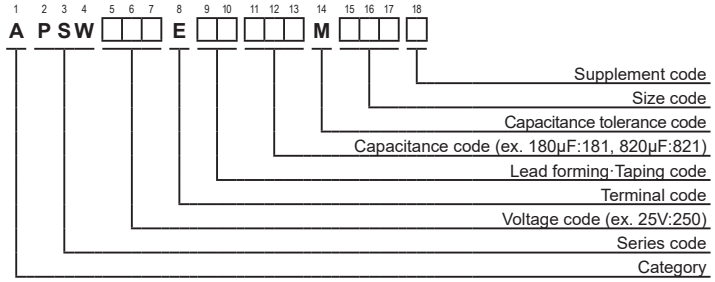


◆ MARKING

EX) 25V180μF

NPCAP™-PSW Series

◆ PART NUMBERING SYSTEM



◆ STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Case size φ D×L(mm)	ESR (mΩ max./20℃ , 100k to 300kHz)	Rated ripple current (mArms/ 105℃ , 100kHz)	Part No.
25	180	6.3×8	28	2,780	APSW250E □□ 181MF08S
	330	8×8	18	3,770	APSW250E □□ 331MH08S
	470	8×11.5	16	4,650	APSW250E □□ 471MHB5S
	820	10×11.5	14	5,000	APSW250E □□ 821MJB5S

□□ :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