

New!

NPCAP™-PSG Series

- Super low ESR, high ripple current capability
- Endurance: 2,000 to 5,000 hours at 105°C
- Rated voltage : 16 to 20V_{dc}
- RoHS Compliant
- Halogen Free

PSG

Downsized

PSF



SPECIFICATIONS

Items	Characteristics	
Category	-55 to +105°C	
Temperature Range		
Rated Voltage	16 to 20V _{dc}	
Capacitance Tolerance	P20% (M)	(at 20°C, 120Hz)
Surge Voltage	Rated voltage(V)B1.15	(at 105°C)
Leakage Current	I=0.2CV or 500μA, whichever is greater	
*Note	Where, I : Leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)	
		(at 20°C after 2 minutes)
Dissipation Factor (tan δ)	0.12 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 5,000 hours (20V : 2,000 hours) at 105°C.	
	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
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	≤ ±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°C for 30 seconds through a protective resistor(R=1kΩ) and discharge for 5 minutes 30 seconds.	
	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°C)	

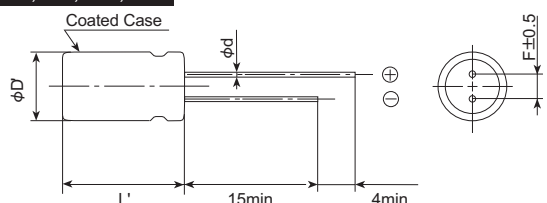
*Note : If any doubt arises, measure the leakage current after the following voltage treatment.

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

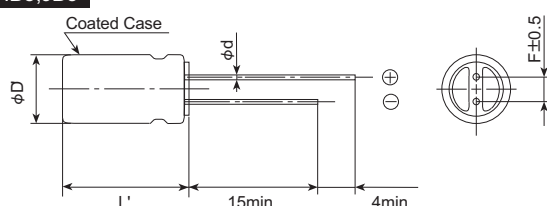
◆ DIMENSIONS [mm]

● Terminal Code : E

F05, F08, H06, H08



HB5, JB5



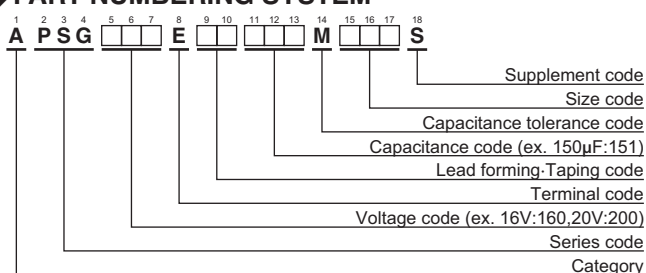
Size code	F05	F08	H06	H08	HB5	JB5
φD	6.3			8.0		10.0
φd	0.45			0.6		
F	2.5			3.5		5.0
φD'	φD+0.5max.					
L'	L+1.0max.			L+1.5max.		

◆ MARKING

EX) 16V150μF



◆ PART NUMBERING SYSTEM



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

◆ STANDARD RATINGS

WV(V _{dc})	Cap(μF)	Case size φD×L (mm)	ESR (mΩ max./20°C, 100 k to 300kHz)	Rated ripple current (mA _{rms} /105°C, 100kHz)	Part No.
16	150	6.3×5	20	3,200	APSG160E□□151MF05S
	270	6.3×8	15	3,800	APSG160E□□271MF08S
	270	8×6	22	3,300	APSG160E□□271MH06S
	470	8×8	16	4,000	APSG160E□□471MH08S
	560	8×11.5	14	4,970	APSG160E□□561MHB5S
	820	10×11.5	12	5,400	APSG160E□□821MJB5S
20	1,000	10×11.5	12	5,400	APSG160E□□102MJB5S
	120	6.3×5	20	3,200	APSG200E□□121MF05S

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