NIPPON CHEMI-CON

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

200 to 450Vdc, Downsized, 105℃

New!

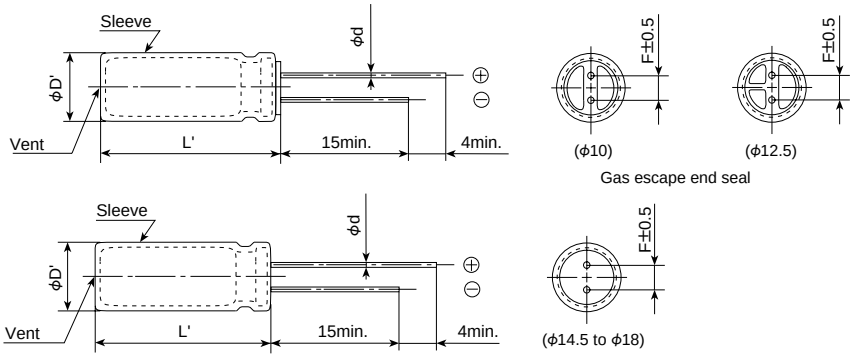
PAG Series

- Downsize, high ripple design (ϕ10 to 18)
- Rated voltage range : 200 to 450Vdc., Capacitance range : 18 to 560μF
- Endurance with ripple current : 105℃ 2000 hours
- Ideal for low profile power supply application
- Non solvent-proof type

◆SPECIFICATIONS

Items	Characteristics					
Category Temperature Range	−40 to +105℃ (200, 400Vdc) −25 to+105℃ (420, 450Vdc)					
Rated Voltage Range	200 to 450Vdc					
Capacitance Tolerance	±20% (M)					(at 20℃, 120Hz)
Leakage Current		After 1 minute		After 5 minutes		
	CV≦1000	I=0.1CV+40		I=0.03CV+15		
	CV>1000	I=0.04CV+100		I=0.02CV+25		
	Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)					(at 20℃)
Dissipation Factor (tanδ)	Rated voltage (Vdc)	200V	400V	420V	450V	
	tanδ (Max.)	0.12	0.15	0.20	0.20	(at 20℃, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)	200V	400V	420V	450V	
	Z(−25℃)/Z(+20℃)	3	5	6	6	
	Z(−40℃)/Z(+20℃)	6	6	—	—	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for 2000 hours at 105℃.					
	Capacitance change	≦±20% of the initial value				
	D.F. (tanδ)	≦200% of the initial specified value				
	Leakage current	≦The initial specified value				
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1000 hours at 105℃ without voltage applied.					
	Capacitance change	≦±20% of the initial value				
	D.F. (tanδ)	≦200% of the initial specified value				
	Leakage current	≦500% of the initial specified value				

◆DIMENSIONS (Radial Lead Type=VB) [mm]



ϕD	10	12.5	14.5	16	18
ϕd	0.6	0.6	0.8	0.8	0.8
F	5.0	5.0	7.5	7.5	7.5
ϕD'	ϕD+0.5 max.				
L'	L+2.0 max.				

◆PART NUMBERING SYSTEM

PAG 200 VB 120 M J40

- J40 : Case code
- M : Cap tolerance (±20%)
- 120 : Nominal cap code
- VB : Radial lead type
- 200 : Rated voltage in volts
- PAG : Series name

Capacitance	Code
10μF	10
100μF	100

◆CASE CODE [mm]

Case code	Case size ϕD×L	Case code	Case size ϕD×L
J30	10×30	L30	16×30
J35	10×35	L35	16×35
J40	10×40	L40	16×40
K30	12.5×30	M30	18×30
K35	12.5×35	M35	18×35
K40	12.5×40	M40	18×40
U30	14.5×30	M45	18×45
U35	14.5×35		
U40	14.5×40		

◆RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Capacitance (μF) \ Frequency (Hz)	120	1k	10k	100k
18 to 82	1.0	1.50	1.75	1.80
100 to 560	1.0	1.30	1.40	1.50

CAT. No. E1001D

New!
PAG Series

◆STANDARD RATINGS

Vdc / Items / μF	200		400	
	Case size φD×L (mm)	Rated ripple current (Arms/105℃, 120Hz)	Case size φD×L (mm)	Rated ripple current (Arms/105℃, 120Hz)
27			10×30	0.26
33			10×35	0.30
39			10×40	0.34
47			12.5×30	0.37
56			12.5×35	0.42
68			12.5×40 14.5×30	0.48
82	10×30	0.44	14.5×35	0.53
100	10×35	0.51	14.5×40 16×30	0.58
120	10×40	0.59	16×35 18×30	0.67
150	12.5×30	0.65	16×40 18×35	0.77
180	12.5×35	0.75	18×40	0.88
220	12.5×40 14.5×30	0.83	18×45	1.00
270	14.5×35 16×30	0.96		
330	16×35 18×30	1.10		
390	16×40 18×35	1.24		
470	18×40	1.39		
560	18×45	1.56		

Vdc / Items / μF	420		450	
	Case size φD×L (mm)	Rated ripple current (Arms/105℃, 120Hz)	Case size φD×L (mm)	Rated ripple current (Arms/105℃, 120Hz)
18			10×30	0.21
22	10×30	0.23	10×35	0.24
27	10×35	0.27	10×40	0.28
33	10×40	0.31	12.5×30	0.31
39	12.5×30	0.33	12.5×35	0.35
47	12.5×35	0.39	12.5×40 14.5×30	0.39
56	12.5×40 14.5×30	0.43	14.5×35 16×30	0.44
68	14.5×35 16×30	0.51	14.5×40 16×35	0.50
82	14.5×40 16×35	0.57	16×40 18×30	0.55
100	16×40 18×30	0.61	18×35	0.65
120	18×35	0.69	18×40	0.74
150	18×40	0.79	18×45	0.81