

New!

PAG Series

- Downsize, high ripple design (φ10 to 18)
- Rated voltage range : 200 to 450V<sub>dc</sub>, Capacitance range : 18 to 560μF
- Endurance with ripple current : 105°C 2000 hours
- Ideal for low profile power supply application
- Non solvent-proof type
- Pb-free design

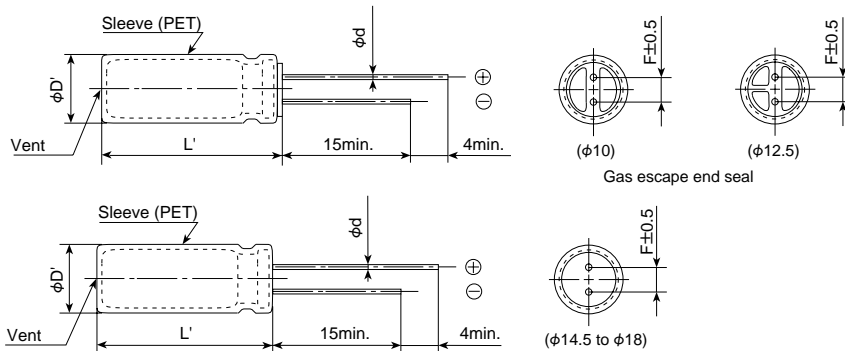


◆SPECIFICATIONS

Items	Characteristics				
Category Temperature Range	-40 to +105°C (200, 400V <sub>dc</sub> ) -25 to +105°C (420, 450V <sub>dc</sub> )				
Rated Voltage Range	200 to 450V <sub>dc</sub>				
Capacitance Tolerance	±20% (M) (at 20°C, 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°C)				
Dissipation Factor (tanδ)	Rated voltage (V <sub>dc</sub> )	200V	400V	420V	450V
	tanδ (Max.)	0.12	0.15	0.20	0.20
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	200V	400V	420V	450V
	Z(-25°C)/Z(+20°C)	3	5	6	6
	Z(-40°C)/Z(+20°C)	6	6	-	-
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 2000 hours at 105°C.				
	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°C after exposing them for 1000 hours at 105°C 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			

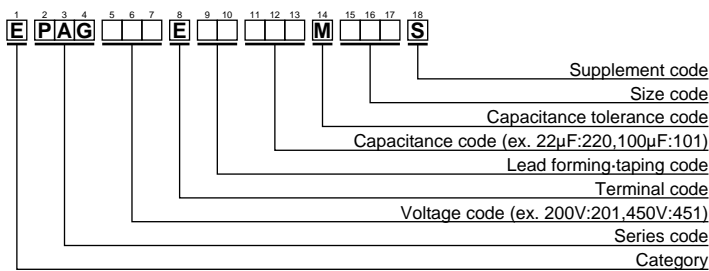
◆DIMENSIONS [mm]

- Terminal Code : E



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



Please refer to "A guide to global code (radial lead type)"

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (mA <sub>rms</sub> /105°C,120Hz)	Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (mA <sub>rms</sub> /105°C,120Hz)	Part No.
200	82	10×30	0.12	440	EPAG201E□□820MJ30S	420	22	10×30	0.20	230	EPAG421E□□220MJ30S
	100	10×35	0.12	510	EPAG201E□□101MJ35S		27	10×35	0.20	270	EPAG421E□□270MJ35S
	120	10×40	0.12	590	EPAG201E□□121MJ40S		33	10×40	0.20	310	EPAG421E□□330MJ40S
	150	12.5×30	0.12	650	EPAG201E□□151MK30S		39	12.5×30	0.20	330	EPAG421E□□390MK30S
	180	12.5×35	0.12	750	EPAG201E□□181MK35S		47	12.5×35	0.20	390	EPAG421E□□470MK35S
	220	12.5×40	0.12	830	EPAG201E□□221MK40S		56	12.5×40	0.20	430	EPAG421E□□560MK40S
	220	14.5×30	0.12	830	EPAG201E□□221MU30S		56	14.5×30	0.20	430	EPAG421E□□560MU30S
	270	14.5×35	0.12	960	EPAG201E□□271MU35S		68	14.5×35	0.20	510	EPAG421E□□680MU35S
	270	16×30	0.12	960	EPAG201E□□271ML30S		68	16×30	0.20	510	EPAG421E□□680ML30S
	330	16×35	0.12	1100	EPAG201E□□331ML35S		82	14.5×40	0.20	570	EPAG421E□□820MU40S
	330	18×30	0.12	1100	EPAG201E□□331MM30S		82	16×35	0.20	570	EPAG421E□□820ML35S
	390	16×40	0.12	1240	EPAG201E□□391ML40S		100	16×40	0.20	610	EPAG421E□□101ML40S
	390	18×35	0.12	1240	EPAG201E□□391MM35S		100	18×30	0.20	610	EPAG421E□□101MM30S
	470	18×40	0.12	1390	EPAG201E□□471MM40S		120	18×35	0.20	690	EPAG421E□□121MM35S
560	18×45	0.12	1560	EPAG201E□□561MM45S	150	18×40	0.20	790	EPAG421E□□151MM40S		
400	27	10×30	0.15	260	EPAG401E□□270MJ30S	450	18	10×30	0.20	210	EPAG451E□□180MJ30S
	33	10×35	0.15	300	EPAG401E□□330MJ35S		22	10×35	0.20	240	EPAG451E□□220MJ35S
	39	10×40	0.15	340	EPAG401E□□390MJ40S		27	10×40	0.20	280	EPAG451E□□270MJ40S
	47	12.5×30	0.15	370	EPAG401E□□470MK30S		33	12.5×30	0.20	310	EPAG451E□□330MK30S
	56	12.5×35	0.15	420	EPAG401E□□560MK35S		39	12.5×35	0.20	350	EPAG451E□□390MK35S
	68	12.5×40	0.15	480	EPAG401E□□680MK40S		47	12.5×40	0.20	390	EPAG451E□□470MK40S
	68	14.5×30	0.15	480	EPAG401E□□680MU30S		47	14.5×30	0.20	390	EPAG451E□□470MU30S
	82	14.5×35	0.15	530	EPAG401E□□820MU35S		56	14.5×35	0.20	440	EPAG451E□□560MU35S
	100	14.5×40	0.15	580	EPAG401E□□101MU40S		56	16×30	0.20	440	EPAG451E□□560ML30S
	100	16×30	0.15	580	EPAG401E□□101ML30S		68	14.5×40	0.20	500	EPAG451E□□680MU40S
	120	16×35	0.15	670	EPAG401E□□121ML35S		68	16×35	0.20	500	EPAG451E□□680ML35S
	120	18×30	0.15	670	EPAG401E□□121MM30S		82	16×40	0.20	550	EPAG451E□□820ML40S
	150	16×40	0.15	770	EPAG401E□□151ML40S		82	18×30	0.20	550	EPAG451E□□820MM30S
	150	18×35	0.15	770	EPAG401E□□151MM35S		100	18×35	0.20	650	EPAG451E□□101MM35S
180	18×40	0.15	880	EPAG401E□□181MM40S	120	18×40	0.20	740	EPAG451E□□121MM40S		
220	18×45	0.15	1000	EPAG401E□□221MM45S	150	18×45	0.20	810	EPAG451E□□151MM45S		

□□ : Lead forming / Taping code

◆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