

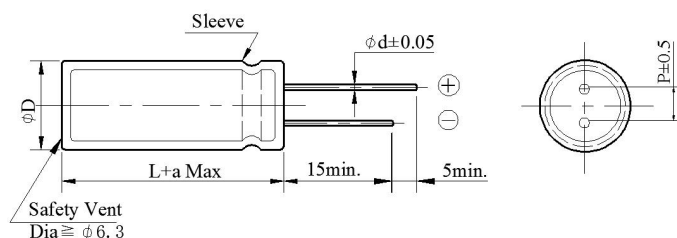
PV Series

- Downsize and high ripple.
- Load life 5,000 hours at 105°C.

◆ SPECIFICATIONS

Item	Performance Characteristics							
Category Temperature Range	-40~ +105℃(160~400V.DC) -25~ +105℃(420~500V.DC)							
Working Voltage Range	160~ 500Vdc							
Capacitance Range	33~560 μF							
Capacitance Tolerance	±20% (at 20℃ and 120Hz)							
Dissipation Factor (tan δ) (at 20℃, 120Hz)	Rated Voltage (V)	160	200	250	400	420	450	500
	tan δ (Max)	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	The above values should be increased by 0.02 for every additional 1000μF							
Leakage Current	I≤0.02CV+10μA I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Apply rated voltage the rated voltage for 2 minutes.							
Low Temperature Characteristics Impedance Ratio(MAX)	Rated Voltage (V)	160~250	400	420 ~ 450	500	(at 120Hz)		
	Z(-25℃)/Z(+20℃)	3	5	6	6			
	Z(-40℃)/Z(+20℃)	6	6	-	-			
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 5,000 hours at 105℃							
	Capacitance change		≒±20% of the initial value					
	Dissipation factor(tan δ)		≒200% of the specified value					
	Leakage current		≒specified value					
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20℃ after the rated voltage applied for 1,000 hours at 105℃without voltage applied.							
	Capacitance change		≒±20% of the initial value					
	Dissipation factor(tan δ)		≒200% of the specified value					
	Leakage current		≒200% of the specified value					
Others	Conforms to JIS-C-5101-4 (1998) and IEC 60384-4							

◆ DIMENSIONS(mm)



ΦD	10	12.5/13	16	18
ΦD	ΦD ± 0.5 Max			
Φd	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
a	$< 20 L \pm 1.5$ Max $\geq 20 L \pm 2.0$ Max			

◆ PART NUMBER SYSTEM(Example : 450V 68 μ F)

PART NUMBER SYSTEM (Example: 100V000																		
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PV Series

◆ Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz

WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)	WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)
160	27	10×13	160	200	15	10×13	120
	33	10×13	180		22	10×13	140
	47	10×16	230		33	10×16	190
	56	13×13	270		68	10×30	450
	68	10×16	280		82	10×25	450
	100	13×20	500		150	13×30	630
	150	13×20	530			16×25	790
	180	13×30	690		220	16×35	850
	220	16×26	820			18×25	840
		18×25	850		330	18×30	1110
	330	18×25	1030		390	16×45	1360
	390	16×35	1200				
	470	18×35	1400				
	680	18×45	1900				
250	10	8×12	80	400	2.2	8×12	46
	22	10×13	140		4.7	6.3×12	60
	33	10×20	260		10	10×16	125
	47	10×20	310		15	8×18	145
	56	16×20	440			10×13	145
	82	13×25	520			10×20	170
	100	16×25	650		22	10×17	190
	120	16×35	820			13×16	210
	150	16×30	860		27	10×18	210
	180	16×30	940			12.5×16	230
	220	16×35	1110		33	13×16	260
	330	18×40	1500		47	13×25	390
	470	18×45	1900			16×20	440
					68	13×35	550
					100	18×30	750
					180	18×40	1100
					220	18×45	1220
420	39	12.5×30	350	450	4.7	8×12	50
	47	16×25	400		10	8×15	110
	56	16×31	480			10×14	120
	68	18×25	510		15	10×17	160
	82	18×25	560		22	13×20	240
	100	16×32	650		27	13×17	250
	120	18×32	760			13×20	300
	150	14.5×45	880		33	13×20	320
	180	16×50	1060		47	16×20	430
					56	18×20	500
					68	16×25	560
					82	18×30	680
					100	18×35	780
					120	18×30	800
					150	18×45	1000
					180	18×40	1020
					220	18×50	1250

PV Series

◆ Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz

WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)	WV(V)	Nominal capacitance (uF)	Case Size ΦD×L (mm)	Max. Rated ripple current @105°C/120Hz (mA rms)
500	3.3	8×12	40				
	4.7	8×14	60				
		10×12	65				
	10	10×14	100				
	12	10×15	110				
	15	10×20	140				
	33	13×25	270				
	39	16×20	300				
	47	16×25	370				
	68	18×32	520				
		22×30	570				
	100	18×45	730				
		22×30	690				

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Cap(uF)	Frequency (Hz)			
		120	1K	10K	100K
160 ~ 450	33~82	1.00	1.75	2.25	2.50
	100~	1.00	1.67	2.05	2.25
500	33~100	1.00	1.75	2.25	2.50