

PCV SERIES

Load Life : 125°C 3000 hours, Chip Type

- High Voltage(∼50Vdc), Ultra Low ESR, High Ripple Current.
- AEC-Q200.

RoHS
compliance



◆SPECIFICATIONS

Items	Characteristics						
Category Temperature Range	−55∼+125°C						
Rated Voltage Range	25∼50Vdc						
Surge Voltage	Rated Voltage ×1.15						
Capacitance Tolerance	±20%(20°C,120Hz)						
Leakage Current(MAX)	The value is shown in “STANDARD SIZE” table (After 2 minutes)						
Dissipation Factor(MAX) (tanδ)	Not more than 0.12(20°C,120Hz)						
Endurance	After applying rated voltage for 3000 hours at 125°C, the capacitors shall meet the following requirements. <table> <tr> <td>Capacitance Change</td><td>Within ±20% of the initial value.</td></tr> <tr> <td>Dissipation Factor</td><td>Not more than 150% of the specified value.</td></tr> <tr> <td>Leakage Current</td><td>Not more than the specified value.</td></tr> </table>	Capacitance Change	Within ±20% of the initial value.	Dissipation Factor	Not more than 150% of the specified value.	Leakage Current	Not more than the specified value.
Capacitance Change	Within ±20% of the initial value.						
Dissipation Factor	Not more than 150% of the specified value.						
Leakage Current	Not more than the specified value.						
Damp heat(Stady state)	After applying rated voltage for 1000 hours at 60°C and humidity of 90 to 95%, the capacitors shall meet the following requirements. <table> <tr> <td>Capacitance Change</td><td>Within ±20% of the initial value.</td></tr> <tr> <td>Dissipation Factor</td><td>Not more than 150% of the specified value.</td></tr> <tr> <td>Leakage Current</td><td>Not more than the specified value.</td></tr> </table>	Capacitance Change	Within ±20% of the initial value.	Dissipation Factor	Not more than 150% of the specified value.	Leakage Current	Not more than the specified value.
Capacitance Change	Within ±20% of the initial value.						
Dissipation Factor	Not more than 150% of the specified value.						
Leakage Current	Not more than the specified value.						
Low Temperature Characteristics Impedance Ratio(MAX)	$Z(-55^{\circ}\text{C})/Z(+20^{\circ}\text{C}) \leq 1.25$ (100kHz) $Z(-25^{\circ}\text{C})/Z(+20^{\circ}\text{C}) \leq 1.15$						

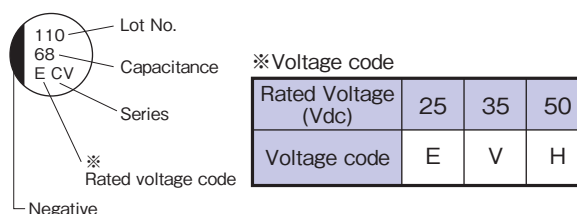
◆PART NUMBER

□□□ PCV □□□□□ M □□□ DXL
Rated Voltage Series Capacitance Capacitance Tolerance Option Case Size

◆MULTIPLIER FOR RIPPLE CURRENT

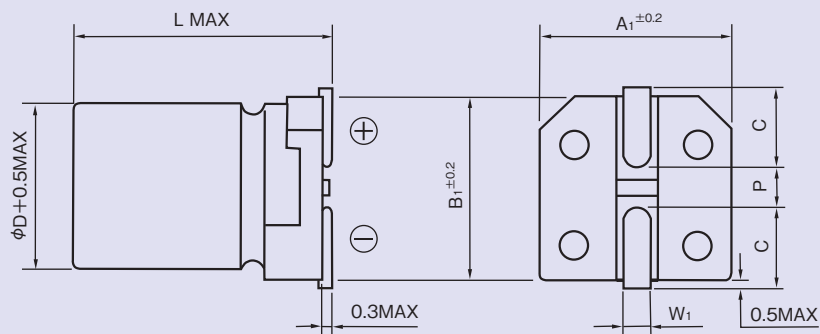
Frequency (Hz)	120	1k	10k	100k≤
Coefficient	0.05	0.30	0.70	1.00

◆MARKING



◆DIMENSIONS

(mm)



ϕD	8		10	
L	12	15	12	15
A1	8.3		10.3	
B1	8.3		10.3	
C	2.9		3.2	
W1	0.8~1.1		0.8~1.1	
P	3.1		4.5	

◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size $\phi D \times L$ (mm)	(tan δ) (120Hz, 20°C)	Leakage Current ($\mu\text{A}/2\text{min}$)	E.S.R.(m Ω ,max)		Rated Ripple Current (mA r.m.s./100kHz)
					20°C, 100kHz	-40°C, 10kHz	
25	68	8×12	0.12	340	35	53	1600
	82	8×15	0.12	410	32	48	2000
	100	10×12	0.12	500	30	45	2000
	150	10×15	0.12	750	29	44	2300
35	33	8×12	0.12	231	37	56	1600
	39	8×15	0.12	273	35	53	2000
	56	10×12	0.12	392	31	47	2000
	68	10×15	0.12	476	30	45	2300
50	22	8×12	0.12	220	38	57	1250
	27	8×15	0.12	270	36	54	1500
	33	10×12	0.12	330	33	50	1600
	47	10×15	0.12	470	31	47	2000