



# HYBRID POLYMER CAPACITORS

PHV

PHV SERIES

UPGRADE

- High Temperature Operation
- Surface Mount Type
- Life:2000~4000 Hours at 135°C
- AEC-Q200 , 85°C/85% RH , RoHS Compliant



## ◆ 規格表 SPECIFICATIONS

Item	Characteristics														
Temperature Range	-55~+135°C(150°C)														
Rated Voltage Range	25~63Vdc														
Capacitance Tolerance	$\pm 20\%$ (20°C, 120Hz)														
Leakage Current (MAX)	I=0.01CV or $3 \mu A$ After 2 minutes (whichever is greater.) I=( $\mu A$ ) Leakage Current      C=( $\mu F$ ) Capacitance      V=(Vdc) Rated Voltage														
Dissipation Factor (MAX)	<table border="1"> <tr> <td>(Vdc) Rated Voltage</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td><math>\tan \delta</math></td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> </tr> </table> (20°C, 120Hz)					(Vdc) Rated Voltage	25	35	50	63	$\tan \delta$	0.14	0.12	0.10	0.08
(Vdc) Rated Voltage	25	35	50	63											
$\tan \delta$	0.14	0.12	0.10	0.08											
Endurance (Life)	After applying rated voltage with rated ripple current for 4000 hours(Φ6.3:2000 hours) at 125°C or 135°C, the capacitors shall meet the following Criteria.														
Biased Humidity/Temperature 85°C/85%RH	After applying rated voltage for 2000 hours at 85°C and humidity of 85%, the capacitors shall meet the following Criteria .														
Over Temperature Durability	After applying rated voltage for 2000 hours(Φ6.3:150 hours) at 150°C, the capacitors shall meet the criteria.														
Criteria	<table border="1"> <tr> <td>Capacitance Change</td> <td>Within <math>\pm 30\%</math> of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>ESR</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>					Capacitance Change	Within $\pm 30\%$ of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	ESR	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.		
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ESR	Not more than 200% of the specified value.														
Leakage Current	Not more than the specified value.														
Low Temperature Stability Impedance Ratio (MAX)	$Z(-55^\circ C)/Z(+20^\circ C) \leq 2.0$ (100kHz) $Z(-25^\circ C)/Z(+20^\circ C) \leq 1.5$														

## ◆ PART NUMBER

□□□	PHV	□□□	M	□□□	ΦDxL
Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Case Size

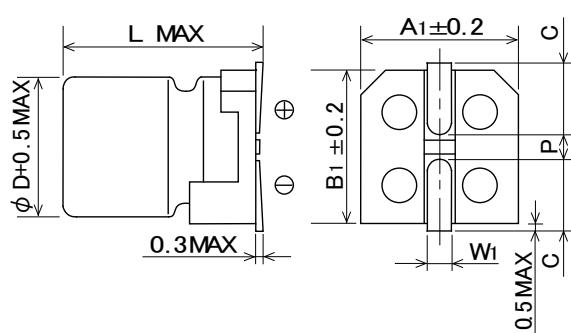
\*Specifications subject to change without notice.



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## ◆寸法図 DIMENTIONS



(mm)						
φD	L	A1	B1	C	W1	P
6.3	6.1	6.6	6.6	2.7	0.5~0.8	1.8
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5

## ◆ Standard size

Rated Voltage (V)	Capacitance ( $\mu$ F)	Size $\phi D \times L$ (mm)	Dissipation Factor(MAX) (tan $\delta$ ) 120Hz,20°C	Leakage Current ( $\mu$ A/2min)	ESR (mΩ MAX)		Rated Ripple Current (mA r.m.s./100kHz)	
					20°C,100kHz	-40°C,10kHz	135°C	125°C
25	56	6.3×6.1	0.14	14.0	50	75	900	1400
	100	6.3×8	0.14	25.0	30	45	1400	2200
	220	8×10.5	0.14	55.0	22	33	1600	2900
	330	10×10.5	0.14	82.5	20	30	2000	3600
35	47	6.3×6.1	0.12	16.5	60	90	900	1400
	68	6.3×8	0.12	23.8	35	53	1400	2200
	150	8×10.5	0.12	52.5	22	33	1600	2900
	270	10×10.5	0.12	94.5	20	30	2000	3600
NEW 50	68	8×10.5	0.10	34.0	30	45	1250	2300
	100	10×10.5	0.10	50.0	28	42	1600	2900
NEW 63	33	8×10.5	0.08	20.8	40	60	1100	2100
	56	10×10.5	0.08	35.3	30	45	1400	2600

## ◆ FREQUENCY CORRECTION COEFFICIENT FOR RIPPLE CURRENT

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

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