

PV Series

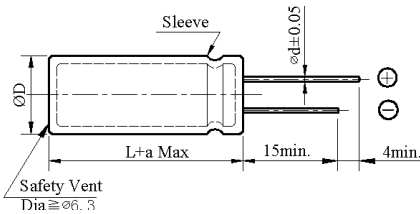
- Downsize and high ripple current
- Load life 2,000 ~ 5,000 hours at 105°C



◆ SPECIFICATIONS

Item	Performance Characteristics																
Category Temperature Range	-25 ~ +105°C																
Working Voltage Range	160 ~ 500Vdc																
Capacitance Range	33 ~ 560 µF																
Capacitance Tolerance	±20% (at 25°C and 120Hz)																
Dissipation Factor (tanδ) (at 25°C, 120Hz)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>400</td> <td>420</td> <td>450</td> <td>500</td> </tr> <tr> <td>tanδ(Max)</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.24</td> </tr> </table>	Rated Voltage (V)	160	200	250	400	420	450	500	tanδ(Max)	0.20	0.20	0.20	0.20	0.20	0.20	0.24
	Rated Voltage (V)	160	200	250	400	420	450	500									
tanδ(Max)	0.20	0.20	0.20	0.20	0.20	0.20	0.24										
The above values should be increased by 0.02 for every additional 1000µF																	
Leakage Current	I=0.02CV or 3000µA whichever is smaller I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 2 minutes																
Low Temperature Characteristics Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>160~250</td> <td>400</td> <td>420 ~ 450</td> <td>500</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>3</td> <td>5</td> <td>6</td> <td>6</td> </tr> </table>	Rated voltage (V)	160~250	400	420 ~ 450	500	Z(-25°C)/Z(+20°C)	3	5	6	6						
	Rated voltage (V)	160~250	400	420 ~ 450	500												
Z(-25°C)/Z(+20°C)	3	5	6	6													
(at 120Hz)																	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25 °C after subjected to DC voltage with the rated ripple current is applied for 2,000 ~5,000 hours at 105 °C																
	<table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±20% of the initial value</td> <td rowspan="3"> <table border="1"> <tr> <th>Size</th> <th>Life time (hours)</th> </tr> <tr> <td>ΦD ≅ 12.5Φ</td> <td>2,000</td> </tr> <tr> <td>ΦD ≳ 16 Φ</td> <td>5,000</td> </tr> </table> </td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ specified value</td> </tr> </table>	Capacitance change	≅ ±20% of the initial value	<table border="1"> <tr> <th>Size</th> <th>Life time (hours)</th> </tr> <tr> <td>ΦD ≅ 12.5Φ</td> <td>2,000</td> </tr> <tr> <td>ΦD ≳ 16 Φ</td> <td>5,000</td> </tr> </table>	Size	Life time (hours)	ΦD ≅ 12.5Φ	2,000	ΦD ≳ 16 Φ	5,000	Dissipation factor(tanδ)	≅ 200% of the specified value	Leakage current	≅ specified value			
	Capacitance change	≅ ±20% of the initial value	<table border="1"> <tr> <th>Size</th> <th>Life time (hours)</th> </tr> <tr> <td>ΦD ≅ 12.5Φ</td> <td>2,000</td> </tr> <tr> <td>ΦD ≳ 16 Φ</td> <td>5,000</td> </tr> </table>		Size	Life time (hours)	ΦD ≅ 12.5Φ	2,000	ΦD ≳ 16 Φ	5,000							
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ΦD ≳ 16 Φ	5,000																
Dissipation factor(tanδ)	≅ 200% of the specified value																
Leakage current	≅ specified value																
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 105°C without voltage applied.																
	<table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±20% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ 200% of the specified value</td> </tr> </table>	Capacitance change	≅ ±20% of the initial value	Dissipation factor(tanδ)	≅ 200% of the specified value	Leakage current	≅ 200% of the specified value										
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	Dissipation factor(tanδ)	≅ 200% of the specified value															
Leakage current	≅ 200% of the specified value																
Others	Conforms to JIS-C-5101-4 (1998), characteristic W																

◆ DIMENSIONS (mm)



ΦD	10	12.5	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	L + 1.5 Max	≅ 35 L+1.5Max ≳ 40 L+2.0 Max	L + 1.5 Max	

◆ PART NUMBER SYSTEM(Example : 420V 68µF)

P	V	2	S	6	8	0	M	N	N	1	6	4	0						
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Special Request

Size code(1640 : 16×40)

Lead length code

Lead forming Type code

Capacitance tolerance code(M: ±20%)

Capacitance code (68µF)

Voltage code (420V)

Series code (PV)

Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	PV	NO.:	PUBLISH DATE	2022-03-25
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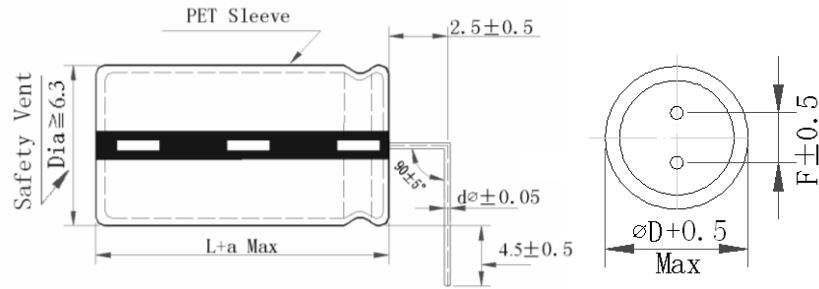


FIG-1

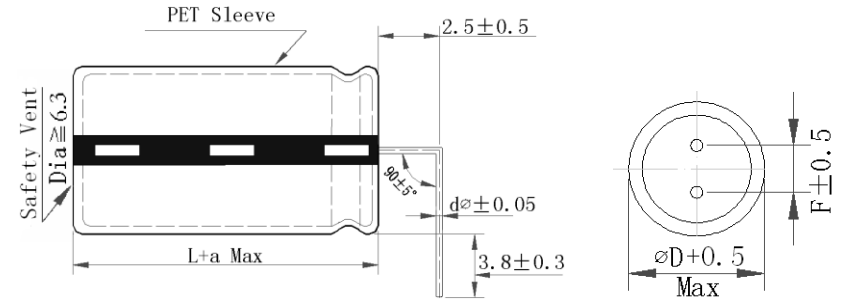


FIG-2

No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @ 25°C (mΩ max/ 120Hz)	Impedance @ 20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
															D Φ	L	a	d	F	
1	PV2G330ML41225F8R	/	33 μF	±20%	400 V	/	-25~+105	/	/	310	/	/	/	8000	12.5	25	/	/	5	FIG-1
2	PV2W101MLT1640EZ	/	100 μF	±20%	450 V	/	-25~+105	/	/	800	1600	1700	/	5000	16	40	/	/	7.5	FIG-2

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
Sleeve Color: Black. Suffix F8 indicates the life of the capacitor is 8000 hrs.	张洪斌	曾爱娥	梁慧妍

Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	PV	NO.:	PUBLISH DATE	2022-03-25
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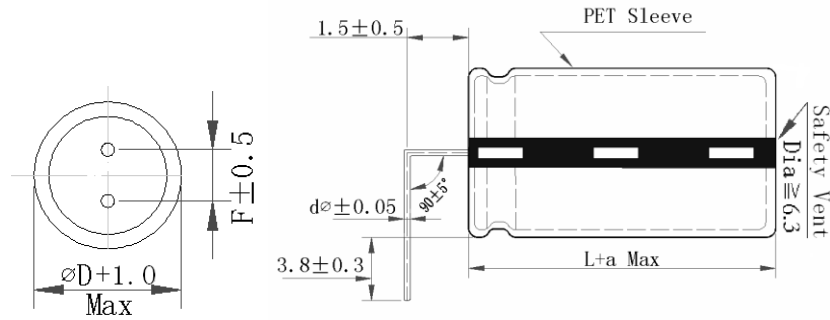


FIG-1

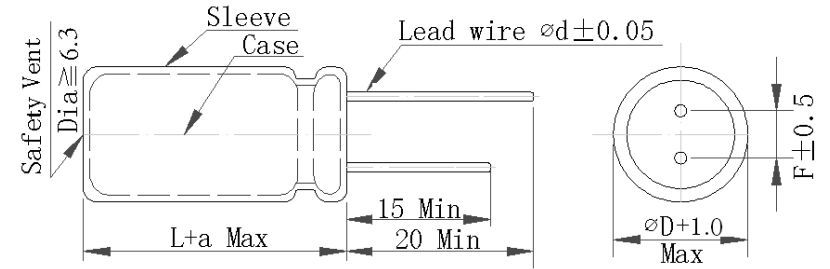


FIG-2

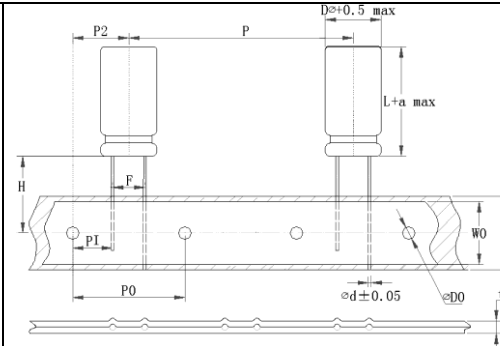
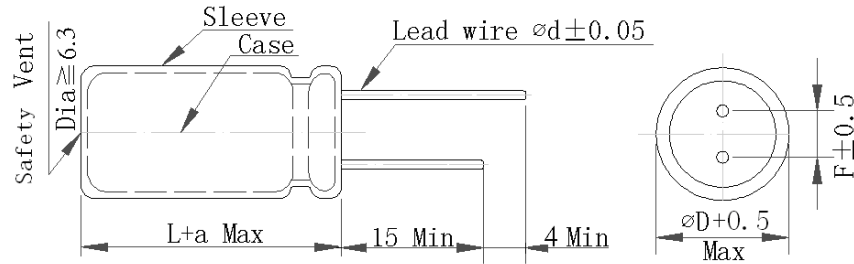
No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
															D Φ	L	a	d	F	
1	PV2W121MRT1845R	/	120 μF	±20%	450 V	/	-25~+105	/	/	950	/	/	/	5000	18	45	/	/	7.5	FIG-1
2	PV2G101MNN2030R	/	100 μF	±20%	400 V	/	-25~+105	/	/	800	/	/	650	5000	20	30	/	/	10	FIG-2

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REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
Sleeve Color: Black.	张洪斌	曾爱娥	梁慧妍

Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	PV	NO.:	PUBLISH DATE	2022-03-25
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Unit(mm):

P=30.0±1.0 H=18.5±0.5
P0=15.0±0.2 W=18.0±0.5
P1=3.75±0.5 W0=12.5MIN
P2=7.5±1.0 ΦD0=4.0±0.2
F=7.5+0.8/-0.2 t=0.7±0.2

Original

FIG-1

No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
															DΦ	L	a	d	F	
1	PV2C681MNN1850	/	680 μF	±20%	160 V	/	-25~+105	/	/	1520	/	/	/	5000	18	50	/	/	7.5	Original
2	PV2E330MNN1220	/	33 μF	±20%	250 V	/	-25~+105	/	/	245	/	/	/	2000	12.5	20	/	/	5	Original
3	PV2F270MNN1620	/	27 μF	±20%	315 V	/	-25~+105	/	/	730	/	/	/	5000	16	20	/	/	7.5	Original
4	PV2G121MNN1830S	/	120 μF	±20%	400 V	/	-25~+105	/	/	800	/	2510	1510	5000	18.5	30	/	/	7.5	Original
5	PV2W680MNN1825RA	/	68 μF	±20%	450 V	/	-25~+105	/	/	580	/	4440	2390	5000	18.5	25	/	/	7.5	Original
6	PV2W820MNN1835	/	82 μF	±20%	450 V	/	-25~+105	/	/	635	/	/	/	5000	18	35	/	/	7.5	Original
7	PV2W151MNN1840R	/	150 μF	±20%	450 V	/	-25~+105	/	/	970	/	/	/	5000	18	40	/	/	7.5	Original
8	PV2W101MNN1635	/	100 μF	±20%	450 V	/	-40~+105	/	/	730	/	/	/	5000	16	35	/	/	7.5	Original
9	PV2W121MNN1640	/	120 μF	±20%	450 V	/	-40~+105	/	/	820	/	/	/	5000	16	40	/	/	7.5	Original
10	PV2H330MNN1820E	/	33 μF	±20%	500 V	/	-25~+105	/	/	320	/	9100	/	5000	18	20	/	/	7.5	Original
11	PV2H470MNN1825	/	47 μF	±20%	500 V	/	-25~+105	/	/	/	1200	/	/	5000	18	25	/	/	7.5	Original
12	PV2H220MPI1625	/	22 μF	±20%	500 V	/	-25~+105	/	/	350	/	10500	/	5000	16	25	/	/	7.5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
Sleeve Color: Black.	张洪斌	曾爱娥	梁慧妍