

Large Snap-In Electrolytic Capacitors

HPR Series



Features:

- Highly reliable capacitors that has characteristics of high temperature 105°C, and can withstand high ripple current
- Suitable for filter of industrial equipment, such as automatic machines, computers and switching power supplies, etc

Specifications:

No.	Item	Performance																																																							
1	Operating Temperature Range	-40°C to+105°C				-25°C to+105°C																																																			
2	Rated Working Voltage Range	10 - 100V DC				160 - 450V DC																																																			
3	Nominal Capacitance Range	330 - 68,000μF				33 - 2,200μF																																																			
4	Capacitance Tolerance	±20% (at+20°C ,120Hz)																																																							
5	Leakage Current	I=0.02CV or 3,000(μA) max Whichever is greater after 3 minutes. I: Leakage Current (μA) C: Rated Capacitance (μF) V: Working Voltage(V)																																																							
6	Dissipation Factor(tanδ) (120Hz\+20°C)	<table><tr><th>W.V. μF</th><th>10-16</th><th>25-35</th><th>50-63</th><th>80-100</th><th>160-250</th><th>315-400</th></tr><tr><td>33-470</td><td></td><td></td><td></td><td></td><td>0.15</td><td>0.2</td></tr><tr><td>560-3,300</td><td>0.25</td><td>0.2</td><td>0.2</td><td>0.2</td><td>0.15</td><td>0.2</td></tr><tr><td>4,700-6,800</td><td>0.35</td><td>0.3</td><td>0.3</td><td>0.25</td><td></td><td></td></tr><tr><td>10,000-22,000</td><td>0.4</td><td>0.35</td><td>0.3</td><td></td><td></td><td></td></tr><tr><td>27,000-47,000</td><td>0.45</td><td>0.4</td><td>0.35</td><td></td><td></td><td></td></tr><tr><td>56,000-68,000</td><td>0.5</td><td>0.45</td><td></td><td></td><td></td><td></td></tr></table> Less than the value under table							W.V. μF	10-16	25-35	50-63	80-100	160-250	315-400	33-470					0.15	0.2	560-3,300	0.25	0.2	0.2	0.2	0.15	0.2	4,700-6,800	0.35	0.3	0.3	0.25			10,000-22,000	0.4	0.35	0.3				27,000-47,000	0.45	0.4	0.35				56,000-68,000	0.5	0.45				
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7	(at 120 Hz) Characteristics at low temperature (stability at 120 Hz)	<table><tr><th>Working Voltage (V)</th><th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>100</th><th>250</th><th>400</th></tr><tr><td>-25°C/+20°C</td><td>6</td><td>6</td><td>4</td><td>3</td><td>3</td><td>4</td><td>4</td><td>4</td></tr><tr><td>-40°C/+20°C</td><td>15</td><td>10</td><td>8</td><td>6</td><td>6</td><td>6</td><td></td><td></td></tr></table>							Working Voltage (V)	16	25	35	50	63	100	250	400	-25°C/+20°C	6	6	4	3	3	4	4	4	-40°C/+20°C	15	10	8	6	6	6																								
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Specifications:

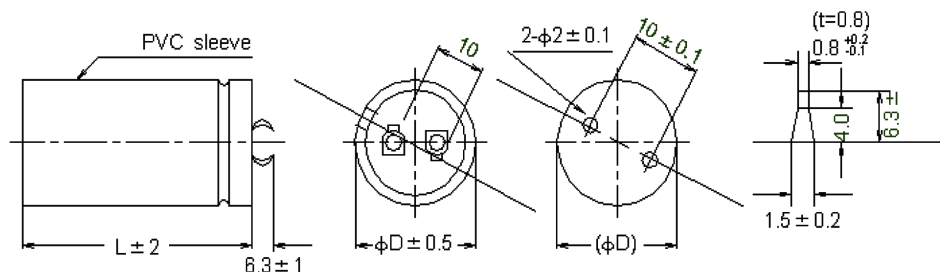
8	Ripple Current	Refer to standard products table (120Hz,+105°C). Correction factor for frequency. <table><tr><th>Ambient Temp.</th><th>Multiplying Factor</th></tr><tr><td>45°C & under</td><td>2.55</td></tr><tr><td>60°C</td><td>2.25</td></tr><tr><td>70°C</td><td>1.8</td></tr><tr><td>105°C</td><td>1</td></tr></table> <table><tr><th rowspan="2">Frequency</th><th colspan="4">Multiplying Factor</th></tr><tr><th>10-50V</th><th>63-100V</th><th>160-250V</th><th>315-400V</th></tr><tr><td>60Hz</td><td>0.9</td><td>0.85</td><td>0.8</td><td>0.9</td></tr><tr><td>120Hz</td><td>1</td><td>1</td><td>1</td><td>1</td></tr><tr><td>300Hz</td><td>1.03</td><td>1.07</td><td>1.15</td><td>1.1</td></tr><tr><td>1kHz</td><td>1.05</td><td>1.13</td><td>1.25</td><td>1.2</td></tr><tr><td>10kHz</td><td>1.1</td><td>1.19</td><td>1.35</td><td>1.3</td></tr></table>	Ambient Temp.	Multiplying Factor	45°C & under	2.55	60°C	2.25	70°C	1.8	105°C	1	Frequency	Multiplying Factor				10-50V	63-100V	160-250V	315-400V	60Hz	0.9	0.85	0.8	0.9	120Hz	1	1	1	1	300Hz	1.03	1.07	1.15	1.1	1kHz	1.05	1.13	1.25	1.2	10kHz	1.1	1.19	1.35	1.3
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9	High Temperature Loading	After 2000hrs. application of DC rated working voltage at +105°C, the capacitor shall meet the following limits: Post test requirements at +20°C <table><tr><td>Leakage current</td><td>≤ the Initial specified value</td></tr><tr><td>Capacitance change</td><td>≤±20% of initial measured value</td></tr><tr><td>Dissipation Factor(tanδ)</td><td>≤200% of initial specified value</td></tr></table>	Leakage current	≤ the Initial specified value	Capacitance change	≤±20% of initial measured value	Dissipation Factor(tanδ)	≤200% of initial specified value																																						
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10	Shelf Life	After storage for 500hrs. at +105°C with no voltage applied. Post test requirements at +20°C Same limits as high temperature loading.																																												



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Dimension:



Dimensions : Millimetres

Case Size Table & Permissible Ripple Current

Case Size : $\emptyset D \times L$ (mm)

Max ripple current : A (rms)

W. V.	Capacitance (μF)	Case Size	R. C.
16 (20)	3,300	22 × 25	0.98
	4,700	22 × 25	1.2
	6,800	22 × 25	1.5
	8,200	22 × 30	2
	10,000	22 × 32	2.33
	12,000	22 × 35	2.8
	15,000	22 × 36	3.1
	18,000	25 × 35	2.7
	22,000	22 × 41	3.3
	27,000	30 × 31	3.2
	33,000	30 × 45	4.1
	39,000	30 × 50	4.6
	47,000	35 × 50	5.3
	56,000	35 × 55	5.9
25 (32)	2,200	22 × 26	0.86
	3,300	22 × 26	1.15
	4,700	22 × 26	1.5
	5,600	22 × 31	1.9
	6,800	22 × 31	2.2
	8,200	22 × 35	2.5
	10,000	25 × 31	2.5
	12,000	25 × 31	3
	15,000	30 × 36	3.7
	18,000	25 × 41	4
	22,000	30 × 45	4.1
	27,000	30 × 45	4.3
	33,000	30 × 51	5.1

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W. V.	Capacitance (μF)	Case Size	R. C.
35 (44)	1,500	22 × 26	1.1
	2,200	22 × 26	1.2
	3,300	22 × 26	1.6
	3,900	22 × 31	1.86
	4,700	22 × 32	2
	5,600	22 × 36	2.5
	6,800	25 × 31	2.3
	8,200	22 × 41	2.9
	10,000	25 × 32	3.2
	12,000	25 × 51	3.7
	15,000	30 × 45	4.1
	18,000	30 × 50	4.3
	22,000	35 × 46	4.4
50 (63)	1,000	22 × 26	0.7
	1,500	22 × 26	0.9
	1,800	22 × 26	1.3
	2,200	22 × 26	1.3
	2,700	22 × 31	1.6
	3,300	25 × 30	1.75
	3,900	25 × 32	2.1
	4,700	25 × 32	2.2
	5,600	25 × 35	2.28
	6,800	25 × 41	2.5
	8,200	25 × 50	3
	10,000	35 × 42	3.4
63 (79)	1,000	25 × 25	0.65
	1,200	22 × 26	0.82
	1,500	22 × 31	0.92
	2,200	25 × 26	1.2
	2,700	25 × 26	1.5
	3,300	25 × 26	1.8
	3,900	25 × 41	2.5
	4,700	25 × 41	2.8
	5,600	30 × 41	3.1
	6,800	30 × 41	3.7
	8,200	30 × 51	4.2
	10,000	30 × 51	4.8



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W. V.	Capacitance (μF)	Case Size	R. C.
100 (125)	330	22 × 26	0.45
	470	22 × 26	0.66
	560	22 × 26	0.8
	680	22 × 26	0.8
	820	25 × 31	1
	1,000	22 × 32	1.1
	1,200	25 × 36	1.2
	1,500	25 × 41	1.4
	1,800	25 × 41	2
	2,200	25 × 46	2.77
	2,700	35 × 37	3.4
	3,300	35 × 45	3.75
	3,900	35 × 46	4.2
	4,700	35 × 52	4.53
250 (300)	100	22 × 26	0.36
	120	22 × 26	0.37
	150	22 × 26	0.48
	180	25 × 26	0.55
	220	22 × 32	0.67
	270	22 × 32	0.8
	330	22 × 41	0.95
	390	25 × 36	1
	470	25 × 41	1.1
	560	25 × 51	1.4
	680	30 × 45	1.6
	820	35 × 45	1.6
	1,000	35 × 47	1.78
400 (450)	47	25 × 25	0.42
	56	22 × 26	0.57
	68	22 × 25	0.6
	82	22 × 25	0.69
	100	22 × 32	0.68
	120	25 × 30	0.75
	150	25 × 35	0.79
	180	25 × 35	0.93
	220	25 × 41	1
	270	25 × 46	1.1
	330	30 × 41	1.1
	390	35 × 47	1.28
	470	35 × 51	1.34



תיאור פריט: קבלים אלקטרוליטים לאלקטרוניקה – SNAP-IN - סדרת HPR

יצרן: MULTICOMP

מיקום באתר: רכיבי אלקטרוניקה / קבלים לאלקטרוניקה / קבלים לאלקטרוניקה – אלקטרוליטים T/H

יבואן: טלמיר אלקטרוניקה בע"מ