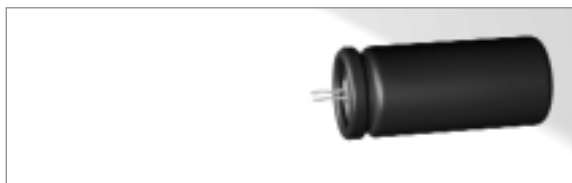


LKP 105 °C

Features

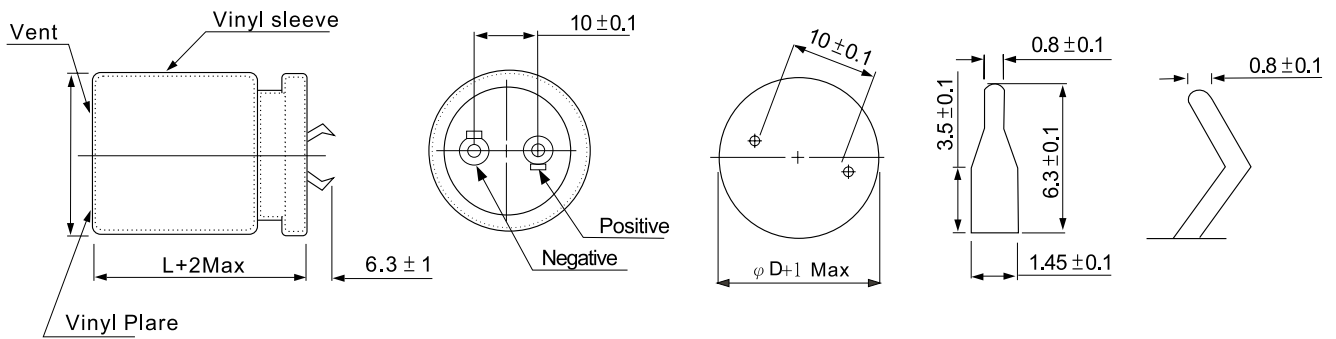
- Has a snap-in terminal which can solder to PCB directly and need not fixture to save processing time
- Suitable for electronic equipment with medium-high voltage circuits
- Printed circuit board terminal snap-in type and lug terminal type available



Specifications

Item	Performance Characteristics																																									
Operating Temperature Range	-40°C to +105 °C																																									
Capacitance Tolerance	±20 % (at 120 Hz, 20 °C)																																									
Leakage Current (at 20 °C)	I = 0.02 CV or 1,5 (µA) whichever is greater (After 5 minutes) Where, C = rated capacitance in µF, V = rated DC working voltage in V.																																									
Dissipation Factor (tan δ at 120 Hz, 20 °C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>tan δ max</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> <td>0.15</td> <td>0.10*</td> <td>0.10*</td> <td>0.10*</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> </tr> </tbody> </table> <p>*:0.15 for φD = 35 mm</p>	Rated Voltage	16	25	35	50	63	100	160	200	250	350	400	450	tan δ max	0.40	0.30	0.25	0.20	0.15	0.15	0.10*	0.10*	0.10*	0.15	0.15	0.15															
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Low Temperature Characteristics (at 120 Hz)	<p>Impedance ratio shall not exceed the values given in the table below</p> <table border="1"> <thead> <tr> <th colspan="2">Rated Voltage</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance ratio</td> <td>Z(-25 °C)/Z(+20 °C)</td> <td>4</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>8</td> <td>8</td> </tr> <tr> <td>Z(-40 °C)/Z(+20 °C)</td> <td>15</td> <td>10</td> <td>8</td> <td>6</td> <td>6</td> <td>5</td> <td>4</td> <td>8</td> <td>10</td> <td>16</td> <td>18</td> <td>20</td> </tr> </tbody> </table>	Rated Voltage		16	25	35	50	63	100	160	200	250	350	400	450	Impedance ratio	Z(-25 °C)/Z(+20 °C)	4	3	3	2	2	2	4	4	4	4	8	8	Z(-40 °C)/Z(+20 °C)	15	10	8	6	6	5	4	8	10	16	18	20
Rated Voltage		16	25	35	50	63	100	160	200	250	350	400	450																													
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Load Life Test	<table border="1"> <thead> <tr> <th>Test Time</th> <th>2000 hrs</th> </tr> </thead> <tbody> <tr> <td>Capacitance Change</td> <td>Within ± 20 % of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 200 % of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </tbody> </table> <p>*The above specifications shall be suitable when the capacitors are restored to 20 °C after the related voltage applied for 2000 hrs at 105 °C .</p>	Test Time	2000 hrs	Capacitance Change	Within ± 20 % of initial value	Dissipation Factor	Less than 200 % of specified value	Leakage Current	Within specified value																																	
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Standards	Satisfies Characteristic W of JIS C 5141																																									

Type 1 Snap-in terminal type (diagram of dimensions)



Dimension & Permissible Ripple Current

Dimension: $\phi D \times L$ (mm)

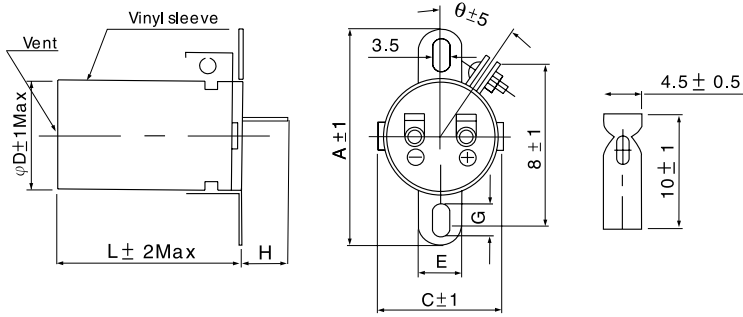
Ripple Current: A /rms at 120 KHz, 105 °C

V.DV μF	16 V				25 V				35 V				50 V			
	ϕD 22	25	30	35	22	25	30	35	22	25	30	35	22	25	30	35
1500													22x35 0.68			
2200									22x35 0.71				22x30 0.76	25x25 0.75		
3300					22x25 0.87				22x30 0.93	25x25 0.71			22x35 0.99	25x30 0.98	30x25 0.98	
4700	22x25 0.93				22x30 1	25x25 0.98			22x35 1.05	25x30 1.05	30x25 1.05		22x45 1.16	25x40 1.11	30x30 1.12	35x25 1.12
6800	22x35 1.27	25x30 0.93			22x35 1.27	25x30 1.27	30x25 1.27		22x45 1.4	25x40 1.4	30x30 1.34	35x25 1.34		25x45 1.42	30x35 1.42	35x30 1.42
10000	22x45 1.43	25x35 1.27	30x25 1.3		22x45 1.43	25x35 1.38	30x30 1.38	35x25 1.38		25x45 1.46	30x35 1.46	35x30 1.46			30x45 1.59	35x40 1.6
15000		25x45 1.43	30x35 1.77	35x30 1.78		25x45 1.84	30x35 1.78	35x30 1.78			30x45 1.96	35x40 1.96				
22000			30x45 2.36	35x35 2.27			30x45 2.36	35x40 2.38				35x45 2.4				

V.DV μF	50 V				63 V				100 V			
	ϕD 22	25	30	35	22	25	30	35	22	25	30	35
1000	22x25 0.68				22x30 0.59	25x25 0.59			20x30 0.59	25x25 0.59		
1500	22x30 0.73	25x25 0.72			22x35 0.77	25x30 0.77	30x25 0.77		22x40 0.81	25x35 0.81	30x25 0.77	
2200	22x35 0.81	25x30 0.8	30x25 0.81			25x40 0.89	30x30 0.85	35x25 0.85		25x45 0.93	30x35 0.9	35x30 0.9
3300	22x45 1.16	25x40 1.09	30x30 1.05	35x25 1.05			30x40 1.16	35x30 1.11			30x45 1.21	35x35 1.16
4700			30x35 1.18	35x30 1.18				35x40 1.3				35x45 1.35
6800			30x45 1.55	35x40 1.56								
8200				35x45 1.65								

Type 2

Lug terminal type (diagram of dimensions)



Mechanical specifications

Unit: mm

φD	A	B	C	E	G	H	θ
22	43	35	30	10	5.5	12	45
25	48	38	33	10	6.0	12	45
30	52	42	38	10	6.0	12	45
35	48	48	44	10	7.0	12	30

Dimension & Permissible Ripple Current

Dimension: φD x L (mm)

Ripple Current: A /rms at 120 Hz, 105 °C

V.DC φD μF	160 V				200 V				250 V			
	22	25	30	35	22	25	30	35	22	25	30	35
220					23x25 0.92				22x30 1	25x25 0.98		
270					22x25 1.03				22x35 1.16	25x25 1.08		
330	22x25 0.98				22x30 1.21	25x25 1.2			22x35 1.28	25x30 1.27	30x25 1.28	
390	22x30 1.1	25x25 1.09			22x35 1.39	25x25 1.31			22x40 1.48	25x35 1.46	30x25 1.39	
470	22x30 1.21	25x25 1.19			22x40 1.62	25x30 1.52	30x25 1.54			25x40 1.69	30x30 1.63	35x25 1.62
560	22x35 1.4	25x30 1.40	30x25 1.4		22x45 1.85	25x35 1.75	30x30 1.78			25x45 1.93	30x35 1.87	35x25 1.78
680	22x40 1.62	25x35 1.61	30x25 1.54		22x45 2.04	25x40 2.04	30x30 1.96	35x25 1.96			30x35 2.06	35x30 2.06
820	22x45 1.86	25x40 1.86	30x25 1.79	30x25 1.79		25x45 2.34	30x25 2.27	35x30 2.27			30x45 2.48	35x35 2.41
1000		25x45 2.15	30x30 2.09	30x25 1.98			30x40 2.63	35x30 2.51				35x40 2.76
1200			30x35 2.29	35x30 2.29			30x45 3	35x35 2.92				35x45 3.14
1500			30x35 2.29	35x35 2.72				35x45 3.38				
1800			30x45 1.8	35x40 3.09								

Dimension & Permissible Ripple Current

 Dimension: \varnothing D x L (mm)

Ripple Current: A /rms at 120 KHz, 105 °C

V.DC \varnothing D μ F	350 V				400 V				420 V				450 V			
	22	25	30	35	22	25	30	35	22	25	30	35	22	25	30	35
47									22x25 0.38				22x25 0.42			
68					22x25 0.52				22x30 0.5				22x30 0.55	25x25 0.54		
82	22x25 0.47				22x30 0.6	25x25 0.6			22x30 0.54	25x25 0.54			22x35 0.64	25x30 0.64		
100	22x30 0.56	25x25 0.55			22x35 0.67	25x25 0.66			22x35 0.63	25x30 0.63			22x40 0.74	25x35 0.74	30x25 0.71	
120	22x35 0.72	25x25 0.6			22x35 0.78	25x30 0.77	30x25 0.78		22x40 0.73	25x30 0.7	30x25 0.70		22x45 0.85	25x35 0.8	30x30 0.82	35x25 0.82
150	22x40 0.83	25x30 0.72	30x25 0.72		22x40 0.91	25x35 0.91	30x30 0.92		22x45 10.86	25x35 0.82	30x30 0.83			25x45 1	30x35 0.96	35x30 0.96
180		25x35 0.83	30x30 0.84		22x45 1.04	25x40 1.04	30x30 1.01	35x25 1.01		25x40 0.94	30x30 0.91	35x25 0.9		25x50 1.14	30x35 1.06	35x30 1.06
220		25x40 0.96	30x35 1.09	35x25 0.93		25x45 1.21	30x35 1.18	35x30 1.18				30x35 1.05	35x30 1.05		30x40 1.22	35x35 1.24
270		25x45 1.12	30x40 1.26	35x30 0.93		25x50 1.4	30x40 1.37	35x30 1.31				30x40 1.22	35x35 1.23			35x40 1.43
330			30x45 1.43	35x30 1.2			30x45 1.57	35x35 1.52					35x40 1.41			35x45 1.63
390				35x35 1.38				35x40 1.73					35x45 1.61			
470				35x40 1.58				35x45 1.97								
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* Special design is available upon request