

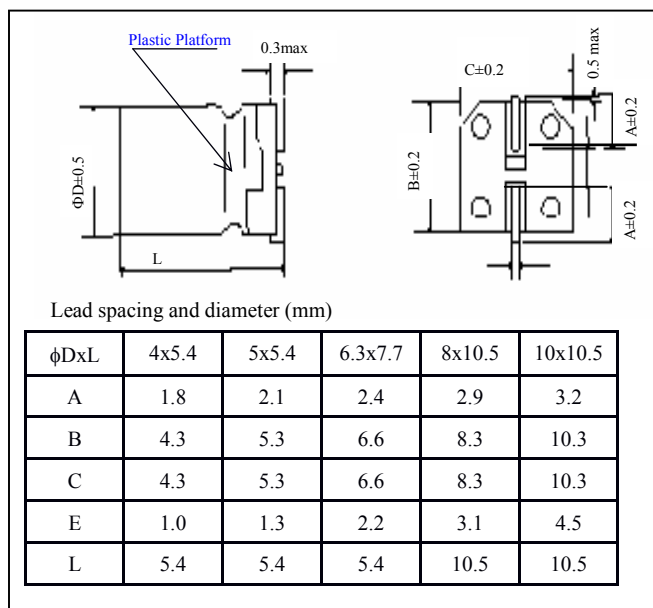
- Temperature up +105°C with load life of 1000~2000 hours
- Lead-free soldering product is available subject to customers request



SPECIFICATIONS

Item	Characteristics																																
Operating Temperature Range (°C)	-40~+105 °C																																
Leakage Current (μ A)	After 2 minutes application of rated voltage, leakage current is not more than 0.002 CV or 0.5 μ A, whichever is greater.																																
Capacitance Tolerance (20°C,120 Hz)	±20% at 120 Hz, 20°C																																
Surge Voltage & Max Tan δ 120Hz, Temperature 20°C	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Tan δ</td> <td>0.35</td> <td>0.26</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.12</td> <td>0.12</td> </tr> </tbody> </table>	Rated voltage (V)	4	6.3	10	16	25	35	50	63	100	Tan δ	0.35	0.26	0.20	0.16	0.14	0.12	0.12	0.12	0.12												
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Applicable Standards	JIS C-5141 and JIS C-5102																																
Resistance to soldering heat	<p>After re-flow soldering according to re-flow soldering condition and restored at room temperature, the meet the characteristics requirements listed at right</p> <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±10% of initial value</td> </tr> <tr> <td>Tan δ</td> <td>High specified value or less</td> </tr> <tr> <td>Leakage Current</td> <td>Initial specified value or less</td> </tr> </tbody> </table>	Capacitance Change	Within ±10% of initial value	Tan δ	High specified value or less	Leakage Current	Initial specified value or less																										
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DIMENSIONS



MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient					
Frequency	50Hz	120Hz	300Hz	1kHz	10kHz
Coefficient	0.70	1.00	1.17	1.36	1.50

Standard Ripple Current

WV CAP (μF)		4		6.3		10		16		25	
4.7	4R7									4x5.4	13
10	10R							4x5.4	18	5x5.4 4x5.4	20 (14)
22	22R			4x5.4	22	5x5.4 4x5.4	25 (20)	5x5.4 4x5.4	27 (20)	6.3x5.4 5x5.4	36 (25)
33	33R	5x5.4 4x5.4	30 (18)	5x5.4 4x5.4	27 (22)	5x5.4 4x5.4	30 (22)	6.3x5.4 5x5.4	40 (28)	6.3x5.4 5x5.4	44 (29)
47	47R	5x5.4 4x5.4	36 (24)	5x5.4 5x5.4	33 (25)	6.3x5.4 5x5.4	41 (30)	6.3x5.4 5x5.4	48 (31)	6.3x5.4	48
100	101	6.3x5.4 5x5.4	60 (43)	6.3x5.4 5x5.4	50 (39)	6.3x5.4	53	6.3x5.4	60	6.3x7.7	91
150	151	6.3x5.4	52	6.3x5.4	55	6.3x5.4	62	6.3x7.7	95	8x10.5 6.3x7.7	140 (100)
220	221	6.3x5.4	57	6.3x7.7 6.3x5.4	105 (67)	6.3x7.7	105	8x10.5 6.3x7.7	150 (105)	8x10.5	175
330	331	6.3x7.7	100	6.3x7.7	105	8x10.5	196	8x10.5	195	10x10.5 8x10.5	240 (220)
470	471	6.3x7.7	105	8x10.5	210	8x10.5	210	10x10.5 8x10.5	295 (230)	10x10.5	280
680	681	8x10.5	210	8x10.5	210	10x10.5	270	10x10.5	315		
1000	102	8x10.5	230	10x10.5 8x10.5	300 (230)	10x10.5	315	10x10.5	340		
1500	152	10x10.5	315	10x10.5	315					Case Size	Allowable Ripple
2200	222	10x10.5	340								

WV CAP (μF)		35		50		63		100	
		1V		1H		1J		2A	
0.1	0R1			4x5.4	0.7	4x5.4	0.7		
0.22	R22			4x5.4	1.6	4x5.4	1.6		
0.33	R33			4x5.4	2.5	4x5.4	2.5		
0.47	R47			4x5.4	3.5	4x5.4	3.5		
1	1R0			4x5.4	7	4x5.4	7	4x5.4	7
2.2	2R2			4x5.4	11	4x5.4	11	6.3x5.4	14
3.3	3R3	4x5.4	13	4x5.4	13	5x5.4	13	6.3x7.7 6.3x5.4	32 (20)
4.7	4R7	4x5.4	14	5x5.4 4x5.4	16 (13)	5x5.4	16	6.3x7.7 6.3x5.4	35 (21)
10	10R	5x5.4 4x5.4	21 (14)	6.3x5.4	24	6.3x7.7 6.3x5.4	39 (24)	8x10.5 6.3x7.7	77 (35)
22	22R	6.3x5.4	38	6.3x7.7 6.3x5.4	51 (42)	8x10.5 6.3x7.7	98 (49)	10x10.5 8x10.5	126 (84)
33	33R	6.3x5.4	42	6.3x7.7	60	8x10.5	112	10x10.5	133
47	47R	6.3x7.7 6.3x5.4	70 (50)	8x10.5 6.3x7.7	120 (63)	10x10.5 8x10.5	160 (119)	10x10.5	140
100	101	8x10.5 6.3x7.7	120 (84)	10x10.5 8x10.5	170 (140)	10x10.5	196		
150	151	8x10.5	155	10x10.5	170				
220	221	10x10.5 8x10.5	220 (190)	10x10.5	220				
330	331	10x10.5	245						
470	471	10x10.5	280						