

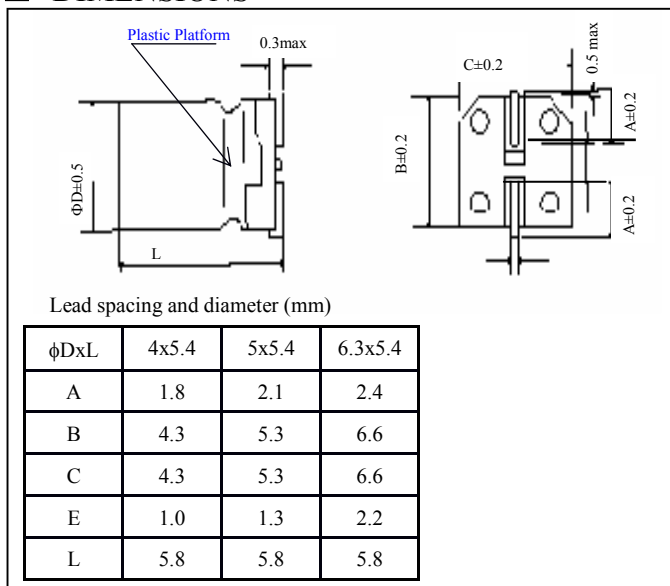
- Low leakage current (0.5μ A to 2.0 μ A max)
- Low cost for replacement of many tantalum applications
- Lead-free soldering product is available subject to customers request



■ SPECIFICATIONS

Item	Characteristics																							
Operating Temperature Range (°C)	-40~+85																							
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	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Surge Volatage</td> <td>8.0</td> <td>13</td> <td>20</td> <td>32</td> <td>44</td> <td>63</td> </tr> <tr> <td>Tan δ Max</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table>	Rated voltage (V)	6.3	10	16	25	35	50	Surge Volatage	8.0	13	20	32	44	63	Tan δ Max	0.24	0.20	0.16	0.14	0.12	0.10		
Rated voltage (V)	6.3	10	16	25	35	50																		
Surge Volatage	8.0	13	20	32	44	63																		
Tan δ Max	0.24	0.20	0.16	0.14	0.12	0.10																		
Low Temperature Stability	<table border="1"> <tr> <td colspan="2">Rated voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td rowspan="2">Impedance Ratio ZT/Z20(max)</td> <td>Z-25°C/Z+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage (V)		6.3	10	16	25	35	50	Impedance Ratio ZT/Z20(max)	Z-25°C/Z+20°C	4	3	2	2	2	2	Z-40°C/Z+20°C	8	6	4	4	3	3
Rated voltage (V)		6.3	10	16	25	35	50																	
Impedance Ratio ZT/Z20(max)	Z-25°C/Z+20°C	4	3	2	2	2	2																	
	Z-40°C/Z+20°C	8	6	4	4	3	3																	
Load Life (85°C)	<table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±25% of initial value</td> </tr> <tr> <td>Tan δ</td> <td>200% or less of initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Initial specified value or less</td> </tr> </table>	Capacitance Change	Within ±25% of initial value	Tan δ	200% or less of initial specified value	Leakage Current	Initial specified value or less																	
Capacitance Change	Within ±25% of initial value																							
Tan δ	200% or less of initial specified value																							
Leakage Current	Initial specified value or less																							
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"> <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> </table>	Capacitance Change	Within ±10% of initial value	Tan δ	High specified value or less	Leakage Current	Initial specified value or less																	
Capacitance Change	Within ±10% of initial value																							
Tan δ	High specified value or less																							
Leakage Current	Initial specified value or less																							

■ DIMENSIONS



■ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient					
Frequency	-50Hz	120Hz	300Hz	1kHz	10kHz
Coefficient	0.7	1	1.17	1.36	1.50

■ Standard Ripple Current

WV		6.3			10			16		
CAP (μF)										
10	10R							4x5.4	25	26
22	22R	4x5.4	18	31	5x5.4	15	35	5x5.4	12	39
33	33R	5x5.4	13	39	5x5.4	10	4.3	6.3x5.4	8	57
47	47R	5x5.4	8.5	47	6.3x5.4	7.0	59	6.3x5.4	6	68
100	101	5x5.4	4.0	71	6.3x5.4	3.3	76			

WV		25			35			50		
CAP (μF)										
0.1	0R1							4x5.4	1660	1.0
0.22	R22							4x5.4	754	2.3
0.33	R33							4x5.4	503	3.5
0.47	R47							4x5.4	353	5
1	1R0							4x5.4	166	10
2.2	2R2							4x5.4	75	15
3.3	3R3							4x5.4	50	18
4.7	4R7	4x5.4	50	19	4x5.4	42	20	5x5.4	35	23
10	10R	5x5.4	23	28	5x5.4	20	30	6.3x5.4	17	34
22	22R	6.3x5.4	11	52	6.3x5.4	9	54	Case	Max	Allowable
33	33R	6.3x5.4	7	63				Size	E.S.R	Ripple

Max E.S.R. (Ω) at 20°C 120 Hz, Allowable Ripple Current (mA rms) at 85°C 120 Hz