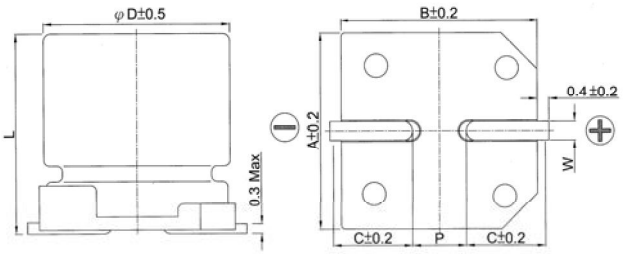
VES Series Type

Electrical Requirements:

<table>
<tr><td>Capacitance Tolerance</td><td>±20% at 120Hz, 20℃</td></tr>
<tr><td>Operating Temperature Range</td><td>-55℃ ~ +105℃</td></tr>
<tr><td>Rated Working Voltage
and Surge Voltage</td><td>
<table>
<tr><td>W. V.</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr>
<tr><td>S. V.</td><td>8</td><td>13</td><td>20</td><td>32</td><td>44</td><td>63</td></tr>
</table>
</td></tr>
<tr><td>Leakage Current</td><td>After DC Voltage is applied to capacitor through the series protective resistance (1KΩ), and then terminal voltage may reach the rated working voltage. The Leakage current when measured after 2 minutes shall be below the value of the following equation.
I = 0.01CV or 3 (μA) whichever is greater
Where I = Leakage Current (μA)
C = Capacitance (μF)
V = Rated DC Working Voltage (V)</td></tr>
<tr><td>Dissipation Factor
(Tan δ at 120 Hz, 20℃)</td><td>
<table>
<tr><td>Rated Voltage</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr>
<tr><td>Tan δ (max)</td><td>0.30</td><td>0.26</td><td>0.22</td><td>0.16</td><td>0.13</td><td>0.12</td></tr>
</table>
</td></tr>
<tr><td>Low Temperature
Characteristics(at 120Hz)</td><td>
<table>
<tr><td colspan="2">Rated Voltage</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</td><td>Z(-25℃)/Z(+20℃)</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></tr>
<tr><td>Z(-40℃)/Z(+20℃)</td><td>8</td><td>5</td><td>4</td><td>3</td><td>3</td><td>3</td></tr>
</table>
</td></tr>
<tr><td>Ripple Current &
Frequency Multipliers</td><td>
<table>
<tr><td>Freq(Hz)
V.DC(V)</td><td>50</td><td>120</td><td>1 K</td><td>10K up</td></tr>
<tr><td>Under 16</td><td>0.80</td><td>1.00</td><td>1.15</td><td>1.25</td></tr>
<tr><td>25 ~ 35</td><td>0.80</td><td>1.00</td><td>1.25</td><td>1.40</td></tr>
<tr><td>50</td><td>0.80</td><td>1.00</td><td>1.35</td><td>1.50</td></tr>
</table>
</td></tr>
</table>

DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

φD	L	A	B	C	W	P±0.2
4	5.3 ±0.2	4.3	4.3	2.0	0.5 to 0.8	1.0
5	5.3 ±0.2	5.3	5.3	2.3	0.5 to 0.8	1.5
6.3	5.3 ±0.2	6.6	6.6	2.7	0.5 to 0.8	2.0
6.3	7.7 ±0.3	6.6	6.6	2.7	0.5 to 0.8	2.0

Dimension: φD × L(mm)

DIMENSION & PERMISSIBLE RIPPLE CURRENT

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

V.DC / μF	Contents	6.3V(0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)	
		φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA
0.1	0R1											4×5.3	2
0.22	R22											4×5.3	3
0.33	R33											4×5.3	4
0.47	R47											4×5.3	5
1	010											4×5.3	7
2.2	2R2											4×5.3	10
3.3	3R3											4×5.3	12
4.7	4R7							4×5.3	12	4×5.3	14	5×5.3	17
10	100			4×5.3	15	4×5.3	16	5×5.3 4×5.3	21 16	5×5.3	23	6.3×5.3	26
22	220	4×5.3	21	5×5.3	25	5×5.3	28	6.3×5.3	36	6.3×5.3	50	6.3×5.3	51
33	330	5×5.3	30	5×5.3	31	6.3×5.3	40	6.3×5.3	44				
47	470	5×5.3	36	6.3×5.3	43	6.3×5.3	47	6.3×5.3	60				
100	101	6.3×5.3	61	6.3×5.3	65	6.3×5.3	70						
220				6.3×7.7	120	6.3×7.7	120						