

RVH Series

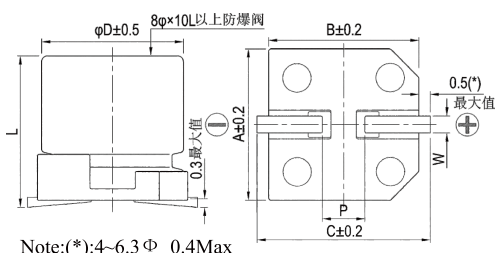
- Available for reflow soldering. Available for high density surface mounting.
- High stability and reliability. Load life 2,000 hours at 125°C
- Adapter to the RoHS. REACH directive.



◆ SPECIFICATIONS

Item	Performance Characteristics																					
Category Temperature Range	-40 ~ +125°C																					
Working Voltage Range	6.3 ~ 50Vdc																					
Capacitance Range	10 ~ 470 μF																					
Capacitance Tolerance	±20% (at 20°C and 120Hz)																					
Dissipation Factor (tanδ) (at 20°C, 120Hz)	<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>Tanδ(Max)</td> <td>0.26</td> <td>0.24</td> <td>0.20</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> </tr> </table>	Rated Voltage (V)	6.3	10	16	25	35	50	Tanδ(Max)	0.26	0.24	0.20	0.18	0.16	0.14							
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Leakage Current	I=0.01CV or 3 μA, whichever is greater I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Impress the rated voltage for 2 minutes																					
Low Temperature Characteristics Impedance Ratio(MAX)	<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>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(-55°C)/Z(+20°C)</td> <td>12</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table> <p style="text-align: right;">(at 120Hz)</p>	Rated voltage (V)	6.3	10	16	25	35	50	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	Z(-55°C)/Z(+20°C)	12	8	6	4	3	3
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Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 125°C. <table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±30% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 300% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ specified value</td> </tr> </table>	Capacitance change	≅ ±30% of the initial value	Dissipation factor(tanδ)	≅ 300% of the specified value	Leakage current	≅ specified value															
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Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20°C after the rated voltage applied for 1,000 hours at 125°C without voltage applied. <table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±30% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 300% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ 500% of the specified value</td> </tr> </table>	Capacitance change	≅ ±30% of the initial value	Dissipation factor(tanδ)	≅ 300% of the specified value	Leakage current	≅ 500% of the specified value															
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Resistance to Soldering Heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After reflow soldering and restored at room temperature, they meet the characteristics requirements listed below. <table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±10% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ specified value</td> </tr> </table>	Capacitance change	≅ ±10% of the initial value	Dissipation factor(tanδ)	≅ specified value	Leakage current	≅ specified value															
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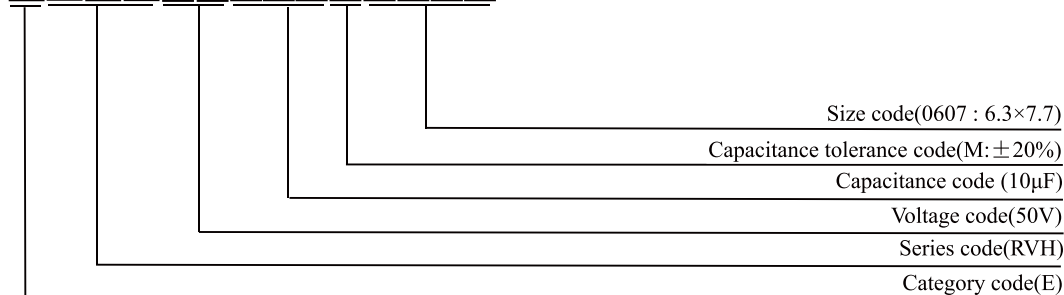
◆ DIMENSIONS (mm)



ΦD	L	A	B	C	W	P±0.2
6.3	7.7±0.5	6.6	6.6	7.2	0.5~0.8	3.1
8	10.2±0.5	8.3	8.3	9.1	0.8~1.1	3.1
10	10.2±0.5	10.3	10.3	11.1	0.8~1.1	4.5

◆ PART NUMBER SYSTEM(Example : 50V 10μF)

E R V H 1 H 1 0 0 M 0 6 0 7



RVH Series

◆ Case size & Permissible rated ripple current: (mA rms) at 125°C / 120Hz

μF \ Vdc	6.3V		10V		16V		25V		35V		50V	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
10											6.3×7.7	25
22											6.3×7.7	50
33									6.3×7.7	53	8×10.2	74
47							6.3×7.7	56	8×10.2	79	10×10.2	94
100	6.3×7.7	60	6.3×7.7	62	8×10.2	84	8×10.2	89	10×10.2	101		
220	8×10.2	90	8×10.2	93	10×10.2	118	10×10.2	124				
330	8×10.2	110	10×10.2	118								
470	10×10.2	130										

◆ **RIPPLE CURRENT MULTIPLIERS**

Frequency Multipliers

Vdc	Frequency (Hz)				
	50Hz	120Hz	300Hz	1KHz	≥10KHz
6.3 ~ 50	0.72	1.00	1.17	1.36	1.50