

提高电子产品使用寿命
降低电子产品的返修率

Improve service life of device
Reduce repair rate of device

RVT Series

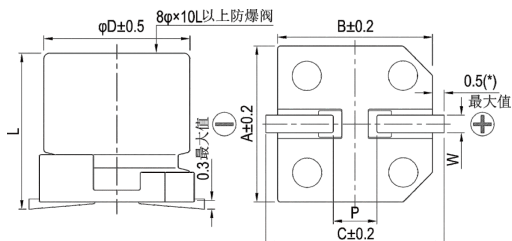
- Available for reflow soldering. Available for high density surface mounting.
- Load life 2,000 hours at 105°C.
- Adapter to the RoHS. REACH directive.



SPECIFICATIONS

Item	Performance Characteristics																																			
Category Temperature Range	-55 ~ +105℃																																			
Working Voltage Range	6.3 ~ 100Vdc																																			
Capacitance Range	1 ~ 1500 μF																																			
Capacitance Tolerance	±20% (at 20℃ and 120Hz)																																			
Dissipation Factor (tanδ) (at 20℃, 120Hz)	<table><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><td>63</td><td>100</td></tr><tr><td>Tanδ(Max)</td><td>0.30</td><td>0.24</td><td>0.20</td><td>0.18</td><td>0.16</td><td>0.14</td><td>0.14</td><td>0.14</td></tr></table>									Rated Voltage (V)	6.3	10	16	25	35	50	63	100	Tanδ(Max)	0.30	0.24	0.20	0.18	0.16	0.14	0.14	0.14									
Rated Voltage (V)	6.3	10	16	25	35	50	63	100																												
Tanδ(Max)	0.30	0.24	0.20	0.18	0.16	0.14	0.14	0.14																												
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><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><td>63</td><td>100</td></tr><tr><td>Z(-25℃)/Z(+20℃)</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>3</td></tr><tr><td>Z(-55℃)/Z(+20℃)</td><td>10</td><td>8</td><td>6</td><td>4</td><td>3</td><td>3</td><td>3</td><td>4</td></tr></table> (at 120Hz)									Rated voltage (V)	6.3	10	16	25	35	50	63	100	Z(-25℃)/Z(+20℃)	4	3	2	2	2	2	2	3	Z(-55℃)/Z(+20℃)	10	8	6	4	3	3	3	4
Rated voltage (V)	6.3	10	16	25	35	50	63	100																												
Z(-25℃)/Z(+20℃)	4	3	2	2	2	2	2	3																												
Z(-55℃)/Z(+20℃)	10	8	6	4	3	3	3	4																												
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 105℃. <table><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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Leakage current	≧ specified value																																			
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20℃ after the rated voltage applied for 1,000 hours at 105℃ without voltage applied. <table><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>≧ 200% of the specified value</td></tr></table>									Capacitance change	≧ ±30% of the initial value	Dissipation factor(tanδ)	≧ 300% of the specified value	Leakage current	≧ 200% of the specified value																					
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Resistance to Soldering Heat	The capacitors shall be kept on the hot plate maintained at 250℃ for 30 seconds.After reflow soldering and restored at room temperature, they meet the characteristics requirements listed below. <table><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)



Note:(*):4~6.3 Φ 0.4Max

Φ D	L	A	B	C	W	P ± 0.2
4	5.4 ± 0.3	4.3	4.3	5.0	0.5~0.8	1.0
5	5.4 ± 0.3	5.3	5.3	6.0	0.5~0.8	1.4
6.3	5.4 ± 0.5	6.6	6.6	7.2	0.5~0.8	1.9
6.3	7.7 ± 0.5	6.6	6.6	7.2	0.5~0.8	3.1
8	6.5 ± 0.5	8.3	8.3	9.1	0.8~1.1	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 : 25V 470 μ F)

E	R	V	T	1	E	4	7	1	M	1	0	1	0
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Size code(1010 : 10 $\times$ 10.2)

Capacitance tolerance code(M: $\pm 20\%$)

Capacitance code (470 μ F)

Voltage code(25V)

Series code(RVT)

Category code(E)

RVT Series

◆ Case size & Permissible rated ripple current: (mA rms) at 105℃ / 120Hz

Vdc μF	6.3V		10V		16V		25V		35V	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
3.3									4×5.4	14
4.7							4×5.4	14	4×5.4	15
10					4×5.4	17	4×5.4	15	4×5.4	15
							5×5.4	21	5×5.4	22
22	4×5.4	22	4×5.4	21	4×5.4	21	5×5.4	26	5×5.4	28
			5×5.4	26	5×5.4	28	6.3×5.4	37	6.3×5.4	40
33	4×5.4	23	4×5.4	23	5×5.4	29	5×5.4	30	6.3×5.4	45
	5×5.4	28	5×5.4	34	6.3×5.4	45	6.3×5.4	45	8×6.5	86
47	4×5.4	26	5×5.4	31	5×5.4	33	6.3×5.4	49	6.3×5.4	54
	5×5.4	34	6.3×5.4	42	6.3×5.4	48	8×6.5	93	6.3×7.7	75
68	5×5.4	36	5×5.4	45	6.3×5.4	50	6.3×5.4	55	6.3×7.7	80
100	5×5.4	40	5×5.4	40	6.3×5.4	63	6.3×7.7	93	6.3×7.7	87
	6.3×5.4	52	6.3×5.4	55	6.3×7.7	93	8×6.5	93	8×10.2	125
150	6.3×5.4	56	6.3×5.4	65	6.3×7.7	100	8×10.2	110	8×10.2	158
220	6.3×5.4	69	6.3×5.4	69	6.3×7.7	110	8×10.2	183	8×10.2	195
	6.3×7.7	108	6.3×7.7	110	8×6.5	110	10×10.2	230	10×10.2	230
330	6.3×7.7	108	6.3×7.7	108	8×10.2	201	8×10.2	228	10×10.2	247
			8×10.2	115			10×10.2	248		
470	6.3×7.7	125	8×10.2	214	8×10.2	240	10×10.2	286	10×10.2	286
	8×10.2	214	10×10.2	266	10×10.2	300				
680	8×10.2	214	10×10.2	277	10×10.2	322				
1000	8×10.2	235	10×10.2	320	10×10.2	347				
	10×10.2	310								
1500	10×10.2	320								

Vdc μF	50V		63V		100V	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
1	4×5.4	8				
2.2	4×5.4	12				
3.3	4×5.4	14	5×5.4	14	6.3×5.4	15
4.7	4×5.4	14	5×5.4	17	6.3×5.4	22
	5×5.4	17	6.3×5.4	22	6.3×7.7	23
10	5×5.4	17	6.3×5.4	26	6.3×7.7	38
	6.3×5.4	25	6.3×7.7	41	8×10.2	80
22	6.3×5.4	43	6.3×7.7	53	8×10.2	90
	6.3×7.7	52	8×10.2	100	10×10.2	129
33	6.3×7.7	63	8×10.2	116	10×10.2	136
47	6.3×7.7	66	8×10.2	125	10×10.2	148
	8×10.2	125	10×10.2	168		
100	8×10.2	146	10×10.2	200		
	10×10.2	178				
150	10×10.2	178				
220	10×10.2	230				

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Frequency (Hz)				
	50	120	300	1K	≥10K
6.3 ~ 100	0.70	1.00	1.17	1.36	1.50