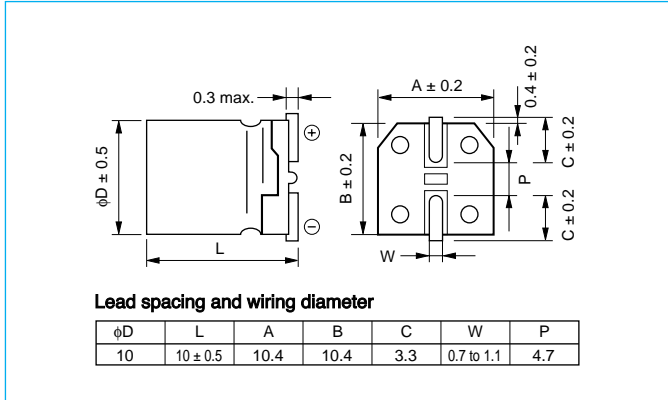


RVK Vertical Chip Electrolytic Capacitors

Series RVK Chip Aluminum Electrolytic Capacitors.

- For surface mount 125°C, 1250 hours guaranteed.
- Carrier taping supplied.

Outline Drawing



Unit: mm

Photo



Chip Type
RVK

Specifications

No.	Item	Performance																				
1	Temperature range (°C)	-40 to +125°C																				
2	Leakage current (µA)	Less than 0.02 CV or 3 whichever is larger (after two minutes) C: Capacitance (µF), V: Voltage (V) (20°C)																				
3	Capacitance tolerance (%)	±20 (20°C, 120 Hz)																				
4	Tangent of loss angle (tan δ)	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td>tan δ</td> <td>0.28</td> <td>0.26</td> <td>0.24</td> <td>0.20</td> <td>0.19</td> <td>0.18</td> </tr> </tbody> </table> (20°C, 120 Hz)	Rated voltage (V)	10	16	25	35	50	63	tan δ	0.28	0.26	0.24	0.20	0.19	0.18						
Rated voltage (V)	10	16	25	35	50	63																
tan δ	0.28	0.26	0.24	0.20	0.19	0.18																
5	Stability at low temperature	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance ratio</td> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> </tr> </tbody> </table> (120 Hz)	Rated voltage (V)	10	16	25	35	50	63	Impedance ratio	Z-25°C/Z+20°C	3	3	3	3	3	Z-40°C/Z+20°C	5	5	5	5	5
Rated voltage (V)	10	16	25	35	50	63																
Impedance ratio	Z-25°C/Z+20°C	3	3	3	3	3																
	Z-40°C/Z+20°C	5	5	5	5	5																
6	Endurance (Applied ripple current)	<table border="1"> <thead> <tr> <th>Test temp.</th> <th>125°C</th> <th>105°C</th> </tr> </thead> <tbody> <tr> <td>Test time</td> <td>φ0: 1250 hrs φ: 1000 hrs</td> <td>φ0: 5000 hrs φ: 4000 hrs</td> </tr> <tr> <td>Leakage current</td> <td colspan="2">Initial specified value or less</td> </tr> <tr> <td>Change in capacitance</td> <td colspan="2">Within ±30% of initial value</td> </tr> <tr> <td>tan δ</td> <td colspan="2">300% or less of initial specified value</td> </tr> </tbody> </table>	Test temp.	125°C	105°C	Test time	φ0: 1250 hrs φ: 1000 hrs	φ0: 5000 hrs φ: 4000 hrs	Leakage current	Initial specified value or less		Change in capacitance	Within ±30% of initial value		tan δ	300% or less of initial specified value						
Test temp.	125°C	105°C																				
Test time	φ0: 1250 hrs φ: 1000 hrs	φ0: 5000 hrs φ: 4000 hrs																				
Leakage current	Initial specified value or less																					
Change in capacitance	Within ±30% of initial value																					
tan δ	300% or less of initial specified value																					
7	Max. storage temp.	<table border="1"> <thead> <tr> <th>Test temp.</th> <th>125°C</th> <th>105°C</th> </tr> </thead> <tbody> <tr> <td>Test time</td> <td>500 hrs</td> <td>1000 hrs</td> </tr> <tr> <td>Leakage current</td> <td colspan="2">Initial specified value or less</td> </tr> <tr> <td>Change in capacitance</td> <td colspan="2">Within ±20% of initial value</td> </tr> <tr> <td>tan δ</td> <td colspan="2">200% or less of initial specified value</td> </tr> </tbody> </table> Pretreatment performed (JIS C 5102).	Test temp.	125°C	105°C	Test time	500 hrs	1000 hrs	Leakage current	Initial specified value or less		Change in capacitance	Within ±20% of initial value		tan δ	200% or less of initial specified value						
Test temp.	125°C	105°C																				
Test time	500 hrs	1000 hrs																				
Leakage current	Initial specified value or less																					
Change in capacitance	Within ±20% of initial value																					
tan δ	200% or less of initial specified value																					
8	Applicable Standards	JIS C 5102 and JIS C 5141.																				

Coefficients of Frequency for Ripple Current

Frequency (Hz)	120	1K	10 k	100 k
Rated Voltage (V)				
10 to 63	0.77	0.88	0.96	1

Coefficients of Temperature for Ripple Current

Temperature (°C)	+85 or less	+105	+125
Coefficients	2.05	1.60	1

RVK Vertical Chip Electrolytic Capacitors

Case size by working voltage & capacitance (in mm)

(mm)

WV(V) Cap.(µF)	10	16	25	35	50	63
10					8x10 / 10x10	
22				10 x 10	8x10 / 10x10	8x10 / 10x10
33				10 x 10	8x10 / 10x10	
47			10 x 10	8x10 / 10x10		
100		10 x 10	8x10 / 10x10	10 x 10		
220	8x10 / 10x10	10 x 10				
330	10 x 10					

Standard Ratings

ELNA PART NO. / WV (V)	CAP. (µF)	SIZE (φx L) (mm)	tan δ	ESR (Ω)	IMPEDANCE (Ω)	Rip Cur. (mAmps)
10 V						
RVK-10V221MG10-R	220	8 x 10	0.28	0.68	0.68	60
RVK-10V221MH10-R	220	10 x 10	0.28	0.58	0.58	107
RVK-10V331MH10-R	330	10 x 10	0.28	0.55	0.55	111
16 V						
RVK-16V101MH10-R	100	10 x 10	0.26	0.58	0.58	102
RVK-16V221MH10-R	220	10 x 10	0.26	0.55	0.55	107
25 V						
RVK-25V470MH10-R	47	10 x 10	0.24	0.58	0.58	70
RVK-25V101MG10-R	100	8 x 10	0.24	0.68	0.68	60
RVK-25V101MH10-R	100	10 x 10	0.24	0.55	0.55	102
35 V						
RVK-35V220MH10-R	22	10 x 10	0.20	0.61	0.61	48
RVK-35V330MH10-R	33	10 x 10	0.20	0.60	0.60	58

ELNA PART NO. / WV (V)	CAP. (µF)	SIZE (φx L) (mm)	tan δ	ESR (Ω)	IMPEDANCE (Ω)	Rip Cur. (mAmps)
RVK-35V470MG10-R	47	8 x 10	0.20	0.68	0.68	55
RVK-35V470MH10-R	47	10 x 10	0.20	0.58	0.58	70
RVK-35V101MH10-R	100	10 x 10	0.20	0.55	0.55	102
50 V						
RVK-50V100MG10-R	10	8 x 10	0.19	0.80	0.80	38
RVK-50V100MH10-R	10	10 x 10	0.19	0.65	0.65	45
RVK-50V220MG10-R	22	8 x 10	0.19	0.80	0.80	38
RVK-50V220MH10-R	22	10 x 10	0.19	0.65	0.65	48
RVK-50V330MG10-R	33	8 x 10	0.19	0.80	0.80	40
RVK-50V330MH10-R	33	10 x 10	0.19	0.60	0.60	58
63 V						
RVK-63V220MG10-R	22	8 x 10	0.18	1.00	1.00	33
RVK-63V220MH10-R	22	10 x 10	0.18	0.67	0.67	48

Note: ESR, Impedance 100 kHz at 20°C
Allowable Ripple Current 100 kHz at 125°C

Chip Type

RVK