RHC MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

ELNA®

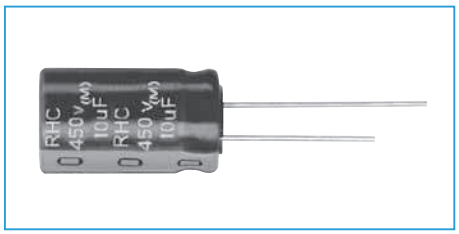
105˚C Use, Miniature, High-Ripple, Long Life Capacitors

GREEN CAP | 105˚C 10000hours

- Higher ripple current.
- Guarantees 5000 to 10000 hours at 105℃.
- Best-suited to electronic ballast.

High ripple, Long life

RHC ⇦ RHS



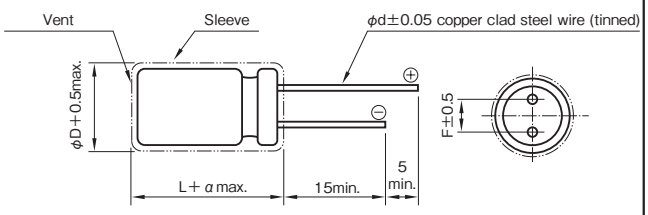
Marking color : White print on a black sleeve

Specifications

Item	Performance
Category temperature range (℃)	−25 to +105
Rated Voltage (V)	160 to 450
Tolerence at rated capacitance (%)	±20 (20℃,120Hz)
Leakage current (μA)	Less than 0.04CV + 100 (after 1 minutes) C : Rated capacitance (μF), V : Rated voltage (V) (20℃)
Tangent of loss angle (tanδ)	Rated voltage (V): 160 to 250 — Tangent of loss angle: 0.10 (0.15＊); Rated voltage (V): 350 to 450 — Tangent of loss angle: 0.12 (0.20＊) ＊The black circles in the capacitance column correspond. (20℃,120Hz)
Characteristics at high and low temperature	Rated voltage (V): 160 to 250, 350 to 450 Impedance ratio Z−25℃/Z+20℃: 3, 6 (120Hz)
Endurance (105℃) (Applied ripple current)	Test time: φ10×12.5 : 5000 hours; φ10×16 to 20 : 8000 hours; φ12.5 to 18 : 10000 hours Leakage current: The initial specifide value or less Capacitance change: Within −30% to + 30% of initial value Tangent of loss angle: 300% or less of the initial specified value
Shelf life (105℃)	Test time: 1000 hours Leakage current: The initial specifide value or less Capacitance change: Within −20% to + 20% of initial value Tangent of loss angle: 200% or less of the initial specified value Voltage application treatment
Applicable standards	JIS C 5101-01, -04 1998 (IEC 60384-1 1992, 60384-4 1985)

Outline Drawing

Unit : mm



φD	10	12.5	16	18
F	5.0	5.0	7.5	7.5
φd	0.6	0.6	0.8	0.8
α	2	2.5	2.5	20L : 3.0 25 to 50L : 2.5

Coefficient of Frequency for Rated Ripple Current

Rated capacitance (μF) \ Frequency (Hz)	120	1k	10k	100k
1 to 5.6	0.20	0.40	0.80	1
6.8 to 18	0.30	0.60	0.90	1
22 to 82	0.40	0.70	0.90	1
100 to 680	0.45	0.75	0.90	1

Part numbering system (example : 400V10μF)

RHC	—	400	V	100	M	H5	#	B	—	⬚
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Optional symbol		Taping(Forming) symbol

NOTE : Design, Specifications are subject to change without notice.
It is recommended that you shall obtain technical specifications from ELNA to ensure that the component is suitable for your use.

Standard Ratings

Case φD×L(mm)	Casing symbol	160 Rated capacitance (μF)	160 ESR (Ω max.)	160 Rated ripple current (mArms)	200 Rated capacitance (μF)	200 ESR (Ω max.)	200 Rated ripple current (mArms)	250 Rated capacitance (μF)	250 ESR (Ω max.)	250 Rated ripple current (mArms)	350 Rated capacitance (μF)	350 ESR (Ω max.)	350 Rated ripple current (mArms)
10×12.5	H3	● 27	7.4	350	4.7	28	200	4.7	28	200	1.5	106	100
					● 12	17	340	● 8.2	24	300	2.2	72	140
											3.3	48	180
10×16	H4	10	13	320	6.8	20	220	6.8	20	250	4.7	34	220
					10	13	320	10	13	320	5.6	28	250
		● 39	5.1	600	● 27	7.4	500	● 22	9.0	450	● 12	22	360
10×20	H5	22	6.0	500	22	6.0	500	22	6.0	500	6.8	23	280
		33	4.0	650							10	16	350
		47	2.8	750	33	4.0	650	● 33	6.0	525	● 15	18	465
10×25	H6	● 68	2.9	910	● 56	3.6	860	33	4.0	720	● 22	12	525
								● 39	5.1	660			
10×30	H7	● 82	2.4	1110	● 68	2.9	1010	● 47	4.2	775	● 27	9.8	585
12.5×20	I5	68	2.0	1180	47	2.8	980	33	4.0	800	22	7.2	650
		● 100	2.0	1275	● 68	2.9	1120				● 27	9.8	700
12.5×25	I6	100	1.3	1420	68	2.0	1300	47	2.8	980	● 39	6.8	825
		● 120	1.7	1500	● 100	2.0	1375	● 68	2.9	1260			
12.5×30	I7	120	1.1	1500	● 120	1.7	1540	● 82	2.4	1410	● 56	4.7	1050
		● 150	1.3	1700									
12.5×35	I8	● 180	1.1	1965	● 150	1.3	1840	● 100	2.0	1465	● 68	3.9	1210
12.5×40	I9	● 220	0.9	2310	● 180	1.1	2120	● 120	1.7	1710	● 82	3.2	1375
16×20	J5	68	2.0	1180	68	2.0	1300	68	2.0	1300	33	4.8	900
		100	1.3	1420									
		● 180	1.1	1900	● 100	2.0	1420	● 82	2.4	1410	● 47	5.6	1080
16×25	J6	150	0.9	1890	● 150	1.3	1890	100	1.3	1530	● 68	3.9	1400
		● 220	0.9	2265				● 120	1.7	1675			
16×31.5	J7	● 330	0.6	3000	● 180	1.1	2200	● 150	1.3	1740	● 82	3.2	1560
					● 220	0.9	2420						
16×35.5	J8	● 390	0.5	3330	● 270	0.7	2710	● 180	1.1	2210	● 100	2.7	1640
16×40	J9	● 470	0.4	3775	● 330	0.6	3120	● 220	0.9	2530	● 120	2.2	1830
18×20	K5	● 180	1.1	1900	–	–	–	● 100	2.0	1530	● 68	3.9	1375
18×25	K6	220	0.6	2370	● 220	0.9	2380	● 150	1.3	1940	68	2.3	1470
		● 270	0.7	2510							● 82	3.2	1510
18×31.5	K7	● 330	0.6	2865	● 270	0.7	2750	● 220	0.9	2200	● 100	2.7	1650
											● 120	2.2	1760
18×35.5	K8	● 470	0.4	3810	● 330	0.6	3100	● 270	0.7	2460	● 150	1.8	2085
18×40	K9	● 560	0.4	4230	● 390	0.5	3275	● 330	0.6	2660	● 180	1.5	2265
18×45	KA	● 680	0.3	4365	● 470	0.4	3475	–	–	–	● 220	1.2	2530
18×50	KB	–	–	–	● 560	0.4	3900	● 390	0.5	3555	–	–	–

Case φD×L(mm)	Casing symbol	400 Rated capacitance (μF)	400 ESR (Ω max.)	400 Rated ripple current (mArms)	450 Rated capacitance (μF)	450 ESR (Ω max.)	450 Rated ripple current (mArms)
10×12.5	H3	1	159	70	● 3.9	68	200
		1.5	106	100			
		2.2	72	140			
		● 3.3	80	160			
10×16	H4	3.3	48	180	2.2	72	150
		4.7	34	220	3.3	48	180
		● 10	27	315	● 6.8	39	280
10×20	H5	5.6	28	250	4.7	34	220
		6.8	23	280	5.6	28	250
		10	16	350	6.8	23	280
		● 15	18	420	● 10	27	330
10×25	H6	● 18	15	445	● 15	18	500
10×30	H7	● 22	12	525	● 22	12	535
12.5×20	I5	15	11	550	10	16	450
		● 22	12	650	● 18	15	525
12.5×25	I6	22	7.2	760	15	11	600
		● 27	9.8	760	● 27	9.8	635
12.5×30	I7	33	4.8	720	● 33	8.0	725
		● 47	5.6	920			
12.5×35	I8	47	3.4	960	● 33	8.0	800
		● 56	4.7	1260	● 39	6.8	850
12.5×40	I9	–	–	–	● 47	5.6	1010
16×20	J5	22	7.2	760	22	7.2	730
		● 33	8.0	900	● 27	9.8	775
16×25	J6	● 47	5.6	1180	33	4.8	980
					● 39	6.8	935
16×31.5	J7	● 68	3.9	1350	● 56	4.7	1125
16×35.5	J8	● 100	2.7	1550	● 68	3.9	1250
16×40	J9	● 120	2.2	1740	● 82	3.2	1650
18×20	K5	● 56	4.7	1350	● 39	6.8	935
18×25	K6	● 68	3.9	1470	47	3.4	1200
18×31.5	K7	82	1.9	1600	● 68	3.9	1260
		● 100	2.7	1720	● 82	3.2	1360
18×35.5	K8	● 120	2.2	1760	● 100	2.7	1685
18×40	K9	● 120	2.2	1945	● 120	2.2	1865
		● 150	1.8	1930			
18×45	KA	● 150	1.8	2215	–	–	–
18×50	KB	–	–	–	● 150	1.8	2040

(Note) Rated ripple current : 105℃ , 100kHz ; ESR. : 20℃ , 120Hz

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