RC3 MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

ELNA®

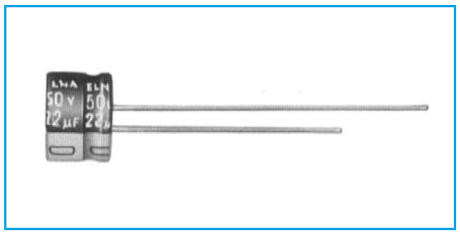
5mm L Standard Capacitors

GREEN CAP

• Diameters from φ3 to φ8mm and a height of 5mm.

Miniaturization

RC3 ⇦ RC2



Marking color : White print on a blue sleeve (φ3: black sleeve)

Specifications

Item	Performance	
Category temperature range (℃)	−40 to +85	
Tolerance at rated capacitance (%)	±20	(20℃,120Hz)
Leakage current (μA)	Less than 0.01CV or 3 whichever is larger (after 2 minutes) C : Rated capacitance (μF); V : Rated voltage (V)	(20℃)

Tangent of loss angle (tanδ)

Rated voltage (V)		4	6.3	10	16	25	35	50
tanδ (max.)	φ3 to φ6.3	0.35	0.24	0.20	0.16	0.14	0.12	0.10
	φ8	0.39	0.28	0.24	0.16	0.14	0.12	0.10

(20℃,120Hz)

Characteristics at high and low temperature

Rated voltage (V)		4	6.3	10	16	25	35	50
Impedance ratio (max.)	Z−25℃/Z+20℃	6	4	3	2	2	2	2
	Z−40℃/Z+20℃	16	10	8	6	4	4	4

(120Hz)

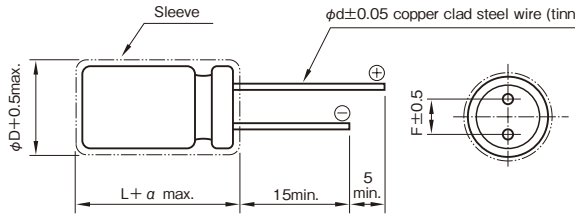
Endurance (85℃) (Applied ripple current)

Test time	1000 hours
Leakage current	The initial specified value or less
Percentage of capacitance change	Within ±20% of initial value
Tangent of the loss angle	200% or less of the initial specified value

Shelf life (85℃)	Test time : 1000 hours ; other items are the same as those for the endurance. Voltage application treatment : According to JIS C5101-1
Applicable standards	JIS C5101-1, -4 1998 (IEC 60384-1 1992, -4 1985)

Outline Drawing

Unit : mm



φD	3	4	5	6.3	8
F	1.0	1.5	2.0	2.5	2.5
φd	0.4	0.45	0.45	0.45	0.45
α	1.0	1.0	1.0	1.0	1.0
Casing symbol	B0	D0	E0	F0	G0

Coefficient of Frequency for Rated Ripple Current

Frequency (Hz) / Rated voltage (V)	50・60	120	1k	10k・100k
4 to 16	0.8	1	1.1	1.2
25 to 35	0.8	1	1.5	1.7
50	0.8	1	1.6	1.9

Part numbering system (example : 6.3V100μF)

RC3	—	6	V	101	M	F0	#	☐
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Additional symbol

Standard Ratings

Rated voltage (V) / Item / Rated capacitance (μF)	4 Case φD×L (mm)	4 Rated ripple current mArms	6.3 Case φD×L (mm)	6.3 Rated ripple current mArms	10 Case φD×L (mm)	10 Rated ripple current mArms	16 Case φD×L (mm)	16 Rated ripple current mArms	25 Case φD×L (mm)	25 Rated ripple current mArms	35 Case φD×L (mm)	35 Rated ripple current mArms	50 Case φD×L (mm)	50 Rated ripple current mArms
0.1	—	—	—	—	—	—	—	—	—	—	—	—	• 4×5	3 (3)
0.22	—	—	—	—	—	—	—	—	—	—	—	—	• 4×5	5 (4)
0.33	—	—	—	—	—	—	—	—	—	—	—	—	• 4×5	6 (5)
0.47	—	—	—	—	—	—	—	—	—	—	—	—	• 4×5	7 (6)
1	—	—	—	—	—	—	—	—	—	—	—	—	• 4×5	10 (8)
2.2	—	—	—	—	—	—	—	—	—	—	• 4×5	14 (11)	4×5	15
3.3	—	—	—	—	—	—	—	—	• 4×5	15 (13)	4×5	17	4×5	18
4.7	—	—	—	—	—	—	• 4×5	17 (14)	4×5	18	4×5	20	5×5	25
10	—	—	• 4×5	20 (17)	4×5	22	4×5	25	5×5	30	5×5	30	6.3×5	40
22	• 4×5	25 (21)	4×5	30	5×5	35	5×5	40	6.3×5	50	6.3×5	55	8×5	75
33	4×5	30	5×5	40	5×5	45	6.3×5	60	6.3×5	65	8×5	80	8×5	90
47	4×5	35	5×5	50	6.3×5	65	6.3×5	70	8×5	95	8×5	100	—	—
100	5×5	60	6.3×5	85	6.3×5	95	8×5	125	8×5	135	—	—	—	—
220	6.3×5	105	8×5	145	8×5	155	—	—	—	—	—	—	—	—
330	8×5	150	8×5	175	—	—	—	—	—	—	—	—	—	—
470	8×5	180	—	—	—	—	—	—	—	—	—	—	—	—

(Note) Rated ripple current : 85℃, 120Hz ; The types of capacitor marked with a black circle are manufactured in the φ3×5 size also ; the figures in the parentheses are applicable to capacitors with φ3.

NOTE
Design, Specifications are subject to change without notice.
Ask factory for technical specifications before purchase and/or use.

5mm L, 105°C Use Capacitors

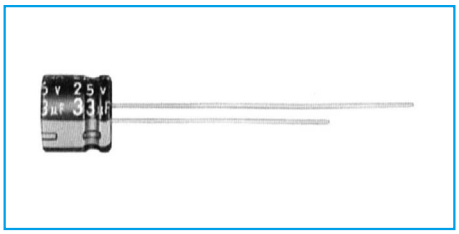
GREEN CAP | 105°C 1000hours | Anti-cleaning solvent

- Diameters from φ4 to φ6.3mm and a height of 5mm.
- Guarantees 1000 hours at 105℃.

R3S

↑ High temperature

RC3



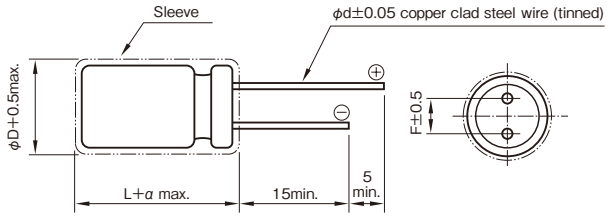
Marking color : White print on a black sleeve

Specifications

Item	Performance
Category temperature range (℃)	−55 to +105
Tolerance at rated capacitance (%)	±20 (20℃,120Hz)
Leakage current (μA)	Less than 0.01CV or 3 whichever is larger (after 2 minutes) C : Rated capacitance (μF); V : Rated voltage (V) (20℃)
Tangent of loss angle (tanδ)	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 tanδ (max.): 0.28 / 0.24 / 0.20 / 0.14 / 0.12 / 0.10 (20℃,120Hz)
Characteristics at high and low temperature	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 Impedance ratio (max.) Z−25℃/Z+20℃: 3 / 3 / 2 / 2 / 2 / 2 Impedance ratio (max.) Z−40℃/Z+20℃: 8 / 5 / 4 / 3 / 3 / 3 (120Hz)
Endurance (105℃) (Applied ripple current)	Test time: 1000 hours Leakage current: The initial specified value or less Percentage of capacitance change: Within ±20% of initial value Tangent of the loss angle: 200% or less of the initial specified value
Shelf life (105℃)	Test time : 1000 hours ; other items are the same as those for the endurance. Voltage application treatment : According to JIS C5101-1
Applicable standards	JIS C5101-1, -4 1998 (IEC 60384-1 1992, -4 1985)

Outline Drawing

Unit : mm



φD	4	5	6.3
F	1.5	2.0	2.5
φd	0.45	0.45	0.45
α	1.0	1.0	1.0
Casing symbol	D0	E0	F0

Coefficient of Frequency for Rated Ripple Current

Rated voltage (V) \ Frequency (Hz)	50・60	120	1k	10k・100k
6.3 to 16	0.64	0.80	0.92	1
25 to 35	0.57	0.71	0.89	1
50	0.53	0.67	0.90	1

Part numbering system (example : 16V47μF)

R3S	—	16	V	470	M	F0	#
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	

Standard Ratings

Rated voltage (V) / Item / Rated capacitance (μF)	6.3		10		16		25		35		50	
	Case φD×L (mm)	Rated ripple current mArms	Case φD×L (mm)	Rated ripple current mArms	Case φD×L (mm)	Rated ripple current mArms	Case φD×L (mm)	Rated ripple current mArms	Case φD×L (mm)	Rated ripple current mArms	Case φD×L (mm)	Rated ripple current mArms
0.1	—	—	—	—	—	—	—	—	—	—	4×5	3
0.22	—	—	—	—	—	—	—	—	—	—	4×5	5
0.33	—	—	—	—	—	—	—	—	—	—	4×5	6
0.47	—	—	—	—	—	—	—	—	—	—	4×5	8
1	—	—	—	—	—	—	—	—	—	—	4×5	11
2.2	—	—	—	—	—	—	—	—	—	—	4×5	17
3.3	—	—	—	—	—	—	—	—	4×5	17	4×5	20
4.7	—	—	—	—	4×5	15	4×5	18	4×5	20	5×5	27
10	—	—	4×5	20	4×5	23	5×5	31	5×5	34	6.3×5	45
22	4×5	26	5×5	34	5×5	38	6.3×5	53	6.3×5	57	—	—
33	5×5	33	5×5	43	6.3×5	56	6.3×5	66	—	—	—	—
47	5×5	45	6.3×5	58	6.3×5	65	—	—	—	—	—	—
100	6.3×5	78	—	—	—	—	—	—	—	—	—	—

(Note) Rated ripple current : 105℃, 100kHz.

NOTE
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Ask factory for technical specifications before purchase and/or use.