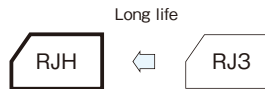


**ELNA****Miniature Aluminum Electrolytic Capacitors RJH series**

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

- Low Impedance capacitors.
- Guaranteed 5000 hours at 105°C.  
( $\phi 5$  to  $\phi 6.3$  : 2000 hours ;  $\phi 8$  to  $\phi 10$  : 3000 hours)
- Environmental : GREEN CAP™, RoHS compliance.



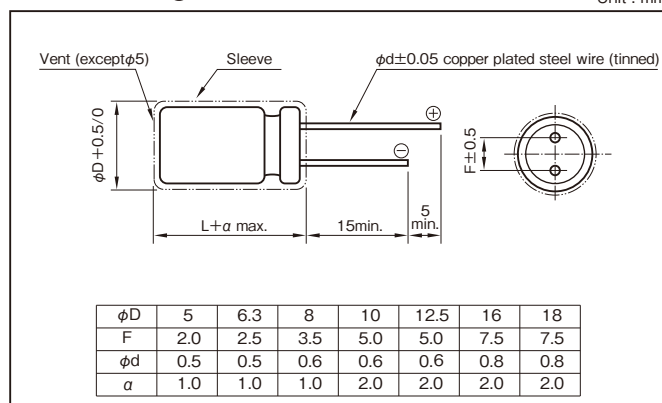
Marking color : White print on a black sleeve

**Specifications**

Item	Performance									
Category temperature range (°C)	-55 to +105									
Tolerance at rated capacitance (%)	±20 (20°C,120Hz)									
Leakage current (μA) (max.)	0.01CV + 2 (after 2 minutes) C : Rated capacitance (μF) ; V : Rated voltage (V) (20°C)									
Tangent of loss angle (tanδ)	Rated voltage (V)		6.3	10	16	25	35	50	63	100
	tanδ (max.)		0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07
	0.02 is added to every 1000μF increase over 1000μF. (20°C,120Hz)									
Characteristics at high and low temperature	Rated voltage (V)		6.3	10	16	25	35	50	63	100
	Impedance ratio (max.)	Z-25°C/Z+20°C	2	2	2	2	2	2	2	2
		Z-55°C/Z+20°C	3	3	3	3	3	3	3	3
(120Hz)										
Endurance (105°C) (Applied ripple current)	Test time		5000 hours (φ5 to φ6.3: 2000 hours) (φ8 to φ10 : 3000 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°C)	Test time		1000 hours							
	Leakage current		The initial specified value or less							
	Percentage of capacitance change		Within ±15% of initial value							
	Tangent of the loss angle		150% or less of the initial specified value							
Voltage application treatment : According to JIS C5101-4 4.1										
Applicable standards	JIS C5101 - 1, - 4 (IEC 60384 - 1, - 4)									

**Outline Drawing**

Unit : mm

**Coefficient of Frequency for Rated Ripple Current**

Rated capacitance ( $\mu F$ ) \ Frequency (Hz)	120	1k	10k	100k
1 to 4.7	0.40	0.68	0.78	1
5.6 to 47	0.50	0.76	0.87	1
56 to 270	0.70	0.85	0.90	1
330 to 1000	0.80	0.93	0.98	1
1200 to 15000	0.90	0.95	1.00	1

**Product code system : 10V5600 $\mu F$  (\*For general product)**

RS*	RJH	562	M	1L	J31	300	T
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Lead-forming and packing code	Additional code

- For details, refer to the various "Product Code System" pages.
  - Lead-forming and packing code on this page are for lead long and standard packing products.
- For standard packing, please refer to the "PACKING" page.

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.

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

### Standard Ratings

Rated voltage (V)		6.3 (1J)					10 (1L)					
Case φD×L (mm)	Size code	Item	Rated capacitance (μF)	ESR (Ω)	Impedance (Ω max.)		Rated ripple current (mA rms)	Rated capacitance (μF)	ESR (Ω)	Impedance (Ω max.)		Rated ripple current (mA rms)
					20℃	−10℃				20℃	−10℃	
5×11.5	C11		100	3.65	0.65	1.46	175	82	3.84	0.65	1.46	175
6.3×11.5	D11		220	1.66	0.31	0.70	290	180	1.75	0.31	0.70	290
8×12	E12		470	0.777	0.17	0.38	488	330	0.956	0.17	0.38	488
8×15	E15		680	0.537	0.13	0.29	617	470	0.671	0.13	0.29	617
8×20	E20		1000	0.365	0.095	0.21	800	680	0.464	0.095	0.21	800
10×12.5	F12		680	0.537	0.10	0.23	625	470	0.671	0.10	0.23	625
10×16	F16		820	0.446	0.080	0.18	825	560	0.563	0.080	0.18	825
10×20	F20		1200	0.305	0.062	0.14	1010	1000	0.316	0.062	0.14	1010
10×25	F25		1500	0.244	0.052	0.12	1190	1200	0.263	0.052	0.12	1190
10×30	F30		2200	0.181	0.044	0.099	1440	1500	0.211	0.044	0.099	1440
12.5×15	G15	•	1200	0.305	0.062	0.14	1010	• 1000	0.316	0.062	0.14	1010
12.5×20	G20		2200	0.181	0.042	0.095	1400	1800	0.176	0.042	0.095	1400
12.5×25	G25		2700	0.148	0.034	0.076	1690	2200	0.159	0.034	0.076	1690
12.5×30	G30		3900	0.111	0.030	0.068	1950	2700	0.130	0.030	0.068	1950
12.5×35	G35		4700	0.099	0.024	0.054	2220	3300	0.116	0.024	0.054	2220
12.5×40	G40		5600	0.089	0.021	0.047	2390	3900	0.098	0.021	0.047	2390
16×16	J16	•	2700	0.148	0.046	0.10	1310	• 1800	0.176	0.046	0.10	1310
16×20	J20	•	4700	0.099	0.034	0.077	1660	• 3300	0.116	0.034	0.077	1660
16×25	J25		5600	0.089	0.028	0.063	2070	3900	0.098	0.028	0.063	2070
16×31.5	J31		6800	0.079	0.025	0.056	2350	5600	0.080	0.025	0.056	2350
16×35.5	J35		8200	0.073	0.022	0.050	2550	6800	0.071	0.022	0.050	2550
16×40	J40		12000	0.059	0.018	0.041	2970	8200	0.067	0.018	0.041	2970
18×16	K16	•	3300	0.131	0.043	0.097	1460	• 2200	0.159	0.043	0.097	1460
18×20	K20	•	5600	0.089	0.030	0.068	1850	• 3900	0.098	0.030	0.068	1850
18×25	K25	•	6800	0.079	0.027	0.061	2120	• 4700	0.089	0.027	0.061	2120
18×31.5	K31		10000	0.064	0.023	0.052	2410	6800	0.071	0.023	0.052	2410
18×35.5	K35		12000	0.059	0.019	0.043	2680	8200	0.067	0.019	0.043	2680
18×40	K40		15000	0.054	0.017	0.038	3010	10000	0.059	0.017	0.038	3010

Rated voltage (V)		16 (1E)					25 (1T)				
Case φD×L (mm)	Item Size code	Rated capacitance (μF)	ESR (Ω)	Impedance (Ω max.)		Rated ripple current (mA rms)	Rated capacitance (μF)	ESR (Ω)	Impedance (Ω max.)		Rated ripple current (mA rms)
				20℃	−10℃				20℃	−10℃	
5×11.5	C11	56	4.74	0.65	1.46	175	39	5.96	0.65	1.46	175
6.3×11.5	D11	120	2.21	0.31	0.70	290	82	2.83	0.31	0.70	290
8×12	E12	270	0.983	0.17	0.38	488	180	1.29	0.17	0.38	488
8×15	E15	330	0.805	0.13	0.29	617	220	1.06	0.13	0.29	617
8×20	E20	470	0.565	0.095	0.21	800	330	0.704	0.095	0.21	800
10×12.5	F12	330	0.805	0.10	0.23	625	220	1.06	0.10	0.23	625
10×16	F16	390	0.681	0.080	0.18	825	270	0.861	0.080	0.18	825
10×20	F20	680	0.391	0.062	0.14	1010	470	0.495	0.062	0.14	1010
10×25	F25	820	0.324	0.052	0.12	1190	560	0.415	0.052	0.12	1190
10×30	F30	1200	0.222	0.044	0.099	1440	820	0.284	0.044	0.099	1440
12.5×15	G15	680	0.391	0.062	0.14	1010	470	0.495	0.062	0.14	1010
12.5×20	G20	1200	0.222	0.042	0.095	1400	820	0.284	0.042	0.095	1400
12.5×25	G25	1500	0.177	0.034	0.076	1690	1000	0.233	0.034	0.076	1690
12.5×30	G30	2200	0.136	0.030	0.068	1950	1500	0.155	0.030	0.068	1950
12.5×35	G35	2700	0.111	0.024	0.054	2220	1800	0.130	0.024	0.054	2220
12.5×40	G40	3300	0.101	0.021	0.047	2390	2200	0.121	0.021	0.047	2390
16×16	J16	1500	0.177	0.046	0.10	1310	820	0.284	0.046	0.10	1310
16×20	J20	2200	0.136	0.034	0.077	1660	1500	0.155	0.034	0.077	1660
16×25	J25	2700	0.111	0.028	0.063	2070	1800	0.130	0.028	0.063	2070
16×31.5	J31	3900	0.086	0.025	0.056	2350	2700	0.099	0.025	0.056	2350
16×35.5	J35	4700	0.078	0.022	0.050	2550	3300	0.091	0.022	0.050	2550
16×40	J40	5600	0.072	0.018	0.041	2970	3900	0.077	0.018	0.041	2970
18×16	K16	1500	0.177	0.043	0.097	1460	1200	0.194	0.043	0.097	1460
18×20	K20	2700	0.111	0.030	0.068	1850	1800	0.130	0.030	0.068	1850
18×25	K25	3900	0.086	0.027	0.061	2120	2700	0.099	0.027	0.061	2120
18×31.5	K31	4700	0.078	0.023	0.052	2410	3300	0.091	0.023	0.052	2410
18×35.5	K35	6800	0.064	0.019	0.043	2680	3900	0.077	0.019	0.043	2680
18×40	K40	8200	0.061	0.017	0.038	3010	4700	0.071	0.017	0.038	3010

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

• : The black circles in the capacitance column denote semi-standard products.

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

### Standard Ratings

Rated voltage (V)			35 (1G)					50 (1U)				
Case φD×L (mm)	Size	Item code	Rated capacitance (μF)	ESR (Ω)	Impedance (Ω max.)		Rated ripple current (mA rms)	Rated capacitance (μF)	ESR (Ω)	Impedance (Ω max.)		Rated ripple current (mA rms)
					20°C	-10°C				20°C	-10°C	
5×11.5	C11	—	—	—	—	—	—	1	166	3.5	7.0	36
5×11.5	C11	—	—	—	—	—	—	2.2	75.4	3.0	6.0	54
5×11.5	C11	—	—	—	—	—	—	3.3	50.3	2.6	5.2	63
5×11.5	C11	—	—	—	—	—	—	4.7	35.3	2.2	4.4	75
5×11.5	C11	—	—	—	—	—	—	10	16.6	1.4	2.8	110
5×11.5	C11	—	—	—	—	—	—	18	9.22	0.95	1.9	120
6.3×11.5	D11	—	—	—	—	—	—	39	4.25	0.43	0.86	148
8×12	E12	—	—	—	—	—	—	68	2.44	0.20	0.40	360
8×15	E15	—	—	—	—	—	—	82	2.02	0.18	0.36	460
8×20	E20	—	—	—	—	—	—	120	1.38	0.13	0.26	670
10×12.5	F12	—	—	—	—	—	—	82	2.02	0.18	0.36	443
10×16	F16	—	—	—	—	—	—	100	1.66	0.15	0.30	553
10×20	F20	—	—	—	—	—	—	180	0.922	0.085	0.17	676
10×25	F25	—	—	—	—	—	—	220	0.754	0.075	0.15	876
10×30	F30	—	—	—	—	—	—	330	0.503	0.055	0.11	1010
12.5×15	G15	•	330	0.604	0.062	0.140	1010	• 180	0.922	0.095	0.19	745
12.5×20	G20	—	560	0.356	0.042	0.095	1400	330	0.503	0.060	0.12	979
12.5×25	G25	—	680	0.293	0.034	0.076	1690	470	0.353	0.044	0.088	1180
12.5×30	G30	—	1000	0.200	0.030	0.068	1950	560	0.297	0.040	0.080	1310
12.5×35	G35	—	1200	0.166	0.024	0.054	2220	680	0.244	0.036	0.072	1470
12.5×40	G40	—	1500	0.133	0.021	0.047	2390	820	0.203	0.034	0.068	1590
16×16	J16	•	560	0.356	0.046	0.10	1310	• 330	0.503	0.065	0.13	982
16×20	J20	•	1000	0.200	0.034	0.077	1660	• 680	0.244	0.045	0.090	1210
16×25	J25	—	1200	0.166	0.028	0.063	2070	820	0.203	0.038	0.076	1490
16×31.5	J31	—	1800	0.111	0.025	0.056	2350	1000	0.166	0.032	0.064	1890
16×35.5	J35	—	2200	0.106	0.022	0.050	2550	1200	0.139	0.028	0.056	2140
16×40	J40	—	2700	0.087	0.018	0.041	2970	1500	0.111	0.026	0.052	2410
18×16	K16	•	680	0.293	0.043	0.097	1460	• 470	0.353	0.048	0.096	1180
18×20	K20	•	1200	0.166	0.030	0.068	1850	• 820	0.203	0.036	0.072	1450
18×25	K25	•	1800	0.111	0.027	0.061	2120	• 1000	0.166	0.032	0.064	1720
18×31.5	K31	—	2200	0.106	0.023	0.052	2410	1500	0.111	0.026	0.052	1970
18×35.5	K35	—	2700	0.087	0.019	0.043	2680	1800	0.074	0.025	0.050	2310
18×40	K40	—	3300	0.081	0.017	0.038	3010	2200	0.073	0.024	0.048	2530

Rated voltage (V)			63 (4E)					100 (1H)				
Case φD×L (mm)	Size	Item code	Rated capacitance (μF)	ESR (Ω)	Impedance (Ω max.)		Rated ripple current (mA rms)	Rated capacitance (μF)	ESR (Ω)	Impedance (Ω max.)		Rated ripple current (mA rms)
					20°C	-10°C				20°C	-10°C	
5×11.5	C11	—	12	11.1	1.2	3.6	120	5.6	20.7	1.9	7.6	57
6.3×11.5	D11	—	27	4.92	0.55	1.7	148	12	9.68	1.1	4.4	78
8×12	E12	—	47	2.82	0.32	0.96	360	22	5.28	0.53	2.1	275
8×15	E15	—	68	1.95	0.24	0.72	469	33	3.52	0.35	1.4	360
8×20	E20	—	82	1.62	0.17	0.51	682	39	2.98	0.27	1.1	490
10×12.5	F12	—	56	2.37	0.23	0.69	448	27	4.30	0.47	1.9	319
10×16	F16	—	68	1.95	0.17	0.51	553	33	3.52	0.32	1.3	424
10×20	F20	—	120	1.11	0.12	0.36	676	56	2.07	0.25	1.0	499
10×25	F25	—	150	0.885	0.10	0.30	876	68	1.71	0.18	0.72	634
10×30	F30	—	180	0.738	0.085	0.26	1020	100	1.16	0.15	0.60	739
12.5×15	G15	•	150	0.885	0.11	0.33	745	• 68	1.71	0.20	0.80	613
12.5×20	G20	—	220	0.604	0.075	0.23	979	100	1.16	0.13	0.52	805
12.5×25	G25	—	270	0.492	0.065	0.20	1180	120	0.968	0.11	0.44	857
12.5×30	G30	—	390	0.341	0.055	0.17	1310	180	0.646	0.090	0.36	1120
12.5×35	G35	—	470	0.283	0.048	0.14	1470	220	0.528	0.075	0.30	1240
12.5×40	G40	—	560	0.237	0.042	0.13	1590	270	0.431	0.060	0.24	1330
16×16	J16	•	220	0.604	0.080	0.24	982	• 120	0.968	0.13	0.52	706
16×20	J20	•	390	0.341	0.057	0.17	1210	• 180	0.646	0.11	0.44	916
16×25	J25	—	470	0.283	0.052	0.16	1490	220	0.528	0.081	0.32	1290
16×31.5	J31	—	680	0.196	0.042	0.13	1890	330	0.352	0.059	0.23	1630
16×35.5	J35	—	820	0.162	0.036	0.11	2140	390	0.298	0.052	0.21	1750
16×40	J40	—	1000	0.133	0.032	0.096	2410	470	0.248	0.045	0.18	1920
18×16	K16	•	330	0.403	0.065	0.20	1200	• 150	0.775	0.12	0.48	871
18×20	K20	•	470	0.237	0.058	0.17	1460	• 270	0.431	0.085	0.34	1170
18×25	K25	•	680	0.196	0.050	0.15	1740	• 330	0.352	0.071	0.28	1500
18×31.5	K31	—	820	0.162	0.042	0.13	1990	390	0.298	0.058	0.23	1630
18×35.5	K35	—	1000	0.133	0.035	0.11	2340	560	0.208	0.054	0.22	1920
18×40	K40	—	1200	0.111	0.032	0.096	2560	680	0.171	0.041	0.16	2100

(Note) Rated ripple current : 105°C, 100kHz ; ESR : 20°C, 120Hz ; Impedance : 100kHz  
• : The black circles in the capacitance column denote semi-standard products.