LAX LARGE CAPACITANCE ALUMINUM ELECTROLYTIC CAPACITORS

ELNA®

Ultra Long Life, High-Reliability Capacitors

GREEN CAP | 105℃ 5000hours

- Ultra Long Life, high-reliability capacitors.
- Guarantees 5000 hours at 105°C.

Long life

LAX ⇦ LAG

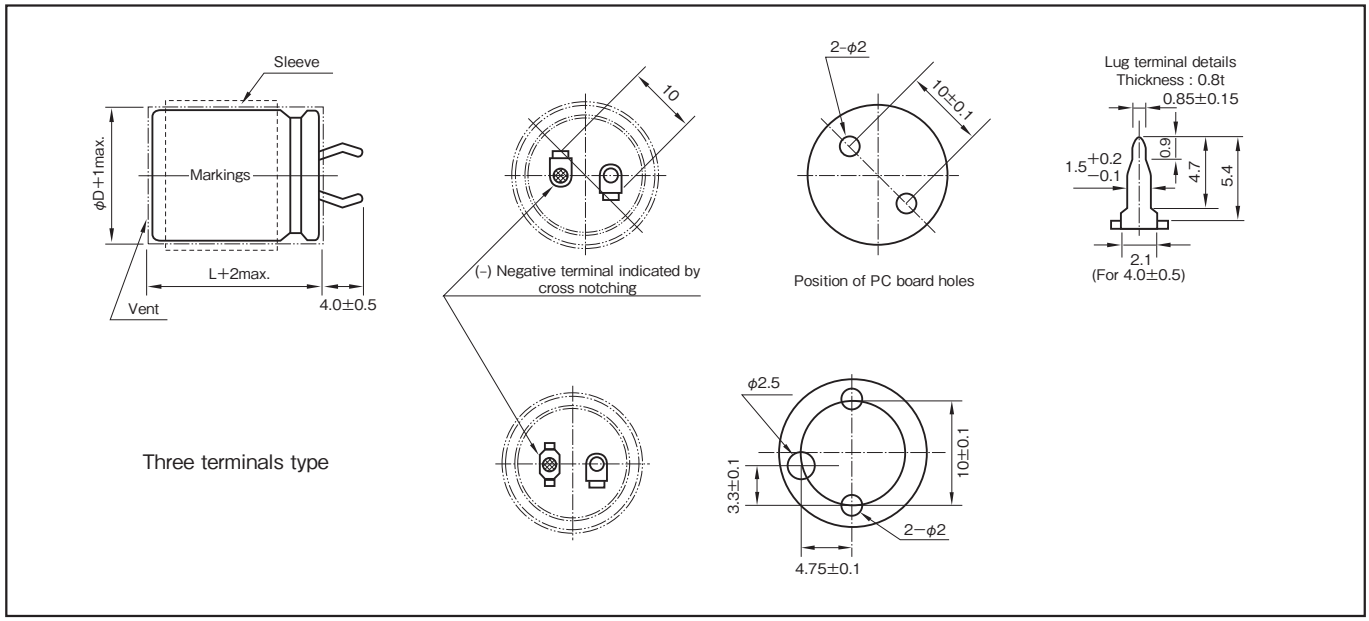
Marking color : White print on a black sleeve

Specifications

Item	Performance		
Category temperature range (℃)	−25 to +105		
Tolerance at rated capacitance (%)	±20		(20℃,120Hz)
Leakage current (μA)	Less than $3\sqrt{CV}$ (after 5 minutes) C : Rated capacitance (μF) ; V : Rated voltage (V)		(20℃)
Tangent of loss angle (tanδ)	Rated voltage (V)	160 to 250	350 to 500
	tanδ (max.)	0.15	0.20
			(20℃,120Hz)
Characteristics at high and low temperature	Percentage of capacitance change (%)	−25℃	Within ±30% of the value at 20℃
	Impedance ratio (max.)	Z−25℃/Z+20℃	4
			(120Hz)
Endurance (105℃) (Applied ripple current)	Test time		5000 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
	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		
Applicable standards	JIS C5101-1, -4 1998 (IEC 60384-1 1992, -4 1985)		

Outline Drawing

Unit: mm



Coefficient of Frequency for Rated Ripple Current

Rated voltage (V) \ Frequency (Hz)	50	120	1k	10k	30k
160 to 250	0.81	1	1.32	1.45	1.50
400 to 500	0.77	1	1.30	1.41	1.43

Part numbering system

series LAX, standard terminal type :200V680μF

LAX	—	200	V	681	M	S34	#	B
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Optional symbol

series LTX, three terminals type :400V330μF

LTX	—	400	V	331	M	S53	#	B
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Optional 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	Rated voltage (V) / Item: Rated capacitance (μF)	160 Rated ripple current (Arms)	180 Rated capacitance (μF)	180 Rated ripple current (Arms)	200 Rated capacitance (μF)	200 Rated ripple current (Arms)	250 Rated capacitance (μF)	250 Rated ripple current (Arms)	350 Rated capacitance (μF)	350 Rated ripple current (Arms)	400 Rated capacitance (μF)	400 Rated ripple current (Arms)	450 Rated capacitance (μF)	450 Rated ripple current (Arms)	500 Rated capacitance (μF)	500 Rated ripple current (Arms)
22×20	S21	220	0.90	180	0.82	180	0.82	120	0.67	82	0.55	56	0.53	56	0.53	39	0.44
		270	1.00	220	0.91	220	0.91	150	0.75	100	0.61	68	0.58	68	0.58	47	0.48
		330	1.10	270	1.00	270	1.00	180	0.82	120	0.67	82	0.64	—	—	56	0.53
22×25	S22	330	1.24	270	1.13	270	1.17	180	1.00	120	0.75	82	0.71	68	0.65	56	0.59
		390	1.35	330	1.25	330	1.29	220	1.11	150	0.84	100	0.79	82	0.71	68	0.65
		470	1.48	390	1.35	390	1.35	270	1.13	180	0.92	120	0.86	100	0.79	82	0.71
22×30	S23	470	1.56	390	1.41	330	1.40	270	1.33	150	0.88	120	0.90	82	0.74	68	0.68
		560	1.68	470	1.55	390	1.57	330	1.47	180	0.96	150	1.01	100	0.82	82	0.74
		680	1.85	560	1.69	470	1.67	390	1.49	220	1.06	180	1.10	120	0.90	100	0.82
22×35	S24	560	1.75	470	1.58	470	1.70	330	1.50	220	1.08	150	1.03	120	0.92	100	0.84
		680	1.93	560	1.73	560	1.73	390	1.52	270	1.20	180	1.13	150	1.03	120	0.92
		820	2.08	680	1.90	680	1.90	470	1.58	—	—	220	1.25	—	—	—	—
22×40	S25	820	2.17	680	1.97	560	1.79	470	1.64	270	1.24	220	1.29	150	1.07	120	0.95
		1000	2.38	820	2.17	680	1.97	560	1.79	330	1.37	270	1.43	180	1.17	150	1.07
22×45	S26	1000	2.42	820	2.21	820	2.21	560	1.82	330	1.40	270	1.46	180	1.19	150	1.09
		—	—	1000	2.44	—	—	680	2.01	390	1.52	—	—	220	1.32	180	1.19
22×50	S27	1200	2.84	1000	2.50	820	2.27	680	2.06	390	1.56	330	1.65	220	1.35	180	1.22
		—	—	—	—	1000	2.50	—	—	—	—	—	—	270	1.50	—	—
25×20	S31	270	1.13	270	1.14	220	1.03	150	0.92	100	0.69	82	0.72	56	0.60	47	0.55
		330	1.25	330	1.26	270	1.14	180	1.01	120	0.76	100	0.80	68	0.66	56	0.60
		390	1.36	390	1.37	330	1.26	220	1.12	150	0.85	120	0.87	82	0.72	68	0.66
25×25	S32	390	1.45	390	1.42	330	1.40	270	1.33	150	0.88	120	0.91	82	0.75	68	0.68
		470	1.59	470	1.56	390	1.52	330	1.47	180	0.97	150	1.01	100	0.84	82	0.75
		560	1.74	560	1.70	470	1.67	390	1.50	220	1.07	180	1.11	120	0.91	100	0.83
25×30	S33	560	1.73	470	1.59	470	1.56	330	1.51	180	0.99	150	1.01	120	0.93	82	0.77
		680	1.91	560	1.74	560	1.70	390	1.55	220	1.09	180	1.11	150	1.03	100	0.85
		820	2.09	680	1.91	680	1.87	470	1.61	270	1.21	220	1.23	180	1.13	120	0.93
25×35	S34	680	1.98	680	1.95	560	1.77	470	1.68	270	1.23	220	1.28	150	1.05	120	0.95
		820	2.17	820	2.14	680	1.95	560	1.77	330	1.36	270	1.42	180	1.16	150	1.05
		1000	2.40	—	—	820	2.14	—	—	—	—	—	—	220	1.28	—	—
25×40	S35	1000	2.60	820	2.20	820	2.20	560	1.82	330	1.40	270	1.45	220	1.31	150	1.08
		1200	2.84	1000	2.43	1000	2.43	680	2.01	390	1.52	330	1.61	270	1.45	180	1.19
25×45	S36	1200	2.90	1000	2.49	1000	2.49	680	2.06	390	1.56	330	1.65	270	1.49	180	1.22
		1500	3.25	1200	2.73	1200	2.73	820	2.26	470	1.71	390	1.79	—	—	220	1.35
25×50	S37	1500	3.38	1200	2.92	1200	2.92	820	2.42	470	1.83	390	1.91	330	1.76	220	1.44
		—	—	1500	3.26	—	—	1000	2.66	560	1.99	—	—	—	—	270	1.59
30×20	S41	470	1.50	390	1.37	330	1.26	270	1.14	150	0.85	120	0.87	82	0.72	68	0.66
		560	1.63	470	1.50	390	1.37	330	1.26	180	0.93	150	0.98	100	0.80	82	0.72
		680	1.80	560	1.64	470	1.50	390	1.37	220	1.03	180	1.07	120	0.87	100	0.80
30×25	S42	680	1.85	560	1.69	470	1.60	390	1.47	220	1.06	180	1.10	120	0.90	100	0.82
		820	2.03	680	1.86	560	1.75	470	1.61	270	1.17	220	1.22	150	1.00	120	0.90
		1000	2.24	820	2.04	680	1.92	560	1.69	330	1.29	270	1.35	180	1.10	150	1.00
30×30	S43	820	2.35	680	1.97	680	1.97	470	1.65	270	1.24	220	1.29	150	1.05	120	0.95
		1000	2.60	820	2.17	820	2.17	560	1.80	330	1.37	270	1.43	180	1.15	150	1.07
		1200	2.84	1000	2.39	1000	2.39	680	1.98	390	1.49	330	1.58	220	1.27	180	1.17
30×35	S44	1200	2.96	1000	2.43	820	2.20	680	2.04	390	1.52	330	1.61	220	1.31	180	1.19
		1500	3.10	1200	2.66	1000	2.43	820	2.24	470	1.67	390	1.75	270	1.45	220	1.31
		—	—	—	—	1200	2.66	—	—	560	1.82	—	—	—	—	—	—
30×40	S45	1500	3.21	1200	2.69	1200	2.69	820	2.42	470	1.69	390	1.77	270	1.47	220	1.33
		1800	3.52	1500	3.01	1500	3.01	1000	2.60	560	1.84	470	1.94	330	1.62	270	1.47
30×45	S46	1800	3.91	1500	3.12	1500	3.12	1000	2.76	680	2.10	470	2.01	330	1.68	270	1.52
		2200	4.32	1800	3.42	—	—	1200	3.00	—	—	560	2.19	390	1.83	330	1.68
30×50	S47	2200	4.50	1800	3.54	1800	3.54	1200	3.00	680	2.18	560	2.27	390	2.07	330	1.74
		—	—	2200	3.91	—	—	—	—	820	2.39	—	—	470	2.22	390	1.90
35×20	S51	560	1.82	560	1.66	470	1.67	330	1.30	180	0.94	150	0.99	120	0.89	100	0.81
		680	2.01	680	1.83	560	1.82	390	1.41	220	1.04	180	1.08	150	0.99	120	0.89
		820	2.20	820	2.01	680	2.01	470	1.55	270	1.15	220	1.20	180	1.08	150	0.99
35×25	S52	820	2.35	820	2.11	680	2.20	470	1.65	270	1.19	220	1.23	180	1.12	150	1.02
		1000	2.60	1000	2.33	820	2.42	560	1.80	330	1.31	270	1.37	220	1.23	180	1.12
		1200	2.84	1200	2.55	1000	2.67	680	1.98	390	1.43	330	1.51	270	1.37	220	1.23
35×30	S53	1200	2.95	1000	2.42	820	2.40	680	2.04	390	1.51	330	1.56	220	1.35	180	1.15
		1500	3.06	1200	2.65	1000	2.65	820	2.24	470	1.66	390	1.69	270	1.50	220	1.27
		1800	3.35	1500	2.96	1200	2.90	1000	2.47	560	1.81	470	1.86	330	1.66	270	1.41
35×35	S54	1500	3.21	1500	3.02	1200	2.65	820	2.35	470	1.69	390	1.76	330	1.62	270	1.46
		1800	3.52	1800	3.31	1500	2.97	1000	2.60	560	1.85	470	1.93	390	1.76	330	1.62
		2200	3.89	—	—	—	—	1200	2.78	680	2.04	560	2.11	—	—	—	—
35×40	S55	2200	4.36	1800	3.37	1500	3.45	1200	2.80	680	2.07	560	2.16	390	2.00	330	1.66
		—	—	2200	3.73	1800	3.78	1500	2.82	820	2.28	—	—	470	2.20	390	1.81
35×45	S56	—	—	2200	3.84	1800	4.00	1500	2.88	820	2.34	680	2.53	470	2.27	390	1.86
		—	—	2700	4.25	2200	4.42	—	—	—	—	—	—	560	2.48	470	2.04
35×50	S57	2700	5.15	2700	4.29	2200	4.60	1800	3.44	1000	2.61	680	2.73	560	2.50	470	2.06
		3300	5.69	—	—	2700	5.09	—	—	—	—	820	3.00	680	2.61	560	2.25

(Note) Rated ripple current : 105℃, 120Hz