

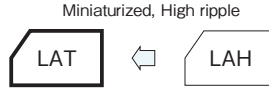
Ultra Miniaturized, High-Reliability, High-Ripple Capacitors

GREEN CAP 105°C 2000hours

- Best suited as input filters for various power supplies.
- Guarantees 2000 hours at 105°C.



Marking color : White print on a black sleeve

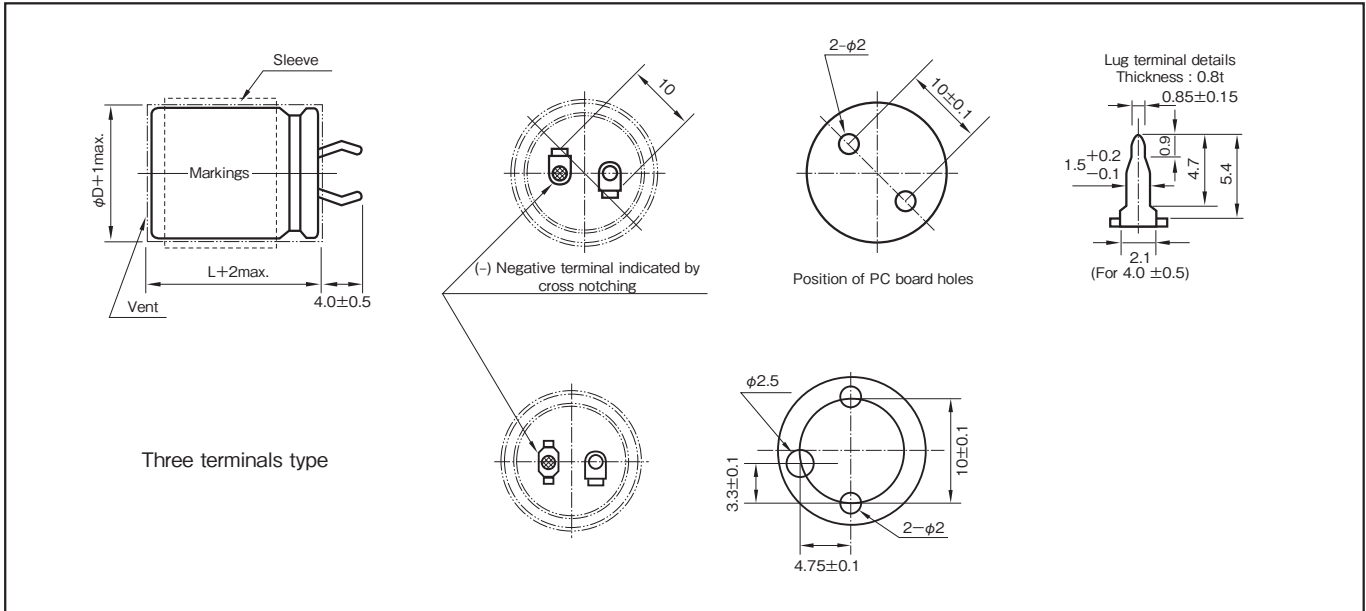


Specifications

Item	Performance	
Category temperature range (°C)	-25 to +105	
Tolerance at rated capacitance (%)	±20 (20°C, 120Hz)	
Leakage current (μA)	Less than $3\sqrt{CV}$ (after 5 minutes) C : Rated capacitance (μF) ; V : Rated voltage (V) (20°C)	
Tangent of loss angle (tanδ)	Rated voltage (V)	160 to 250
	tanδ (max.)	0.15
Characteristics at high and low temperature	Percentage of capacitance change (%)	Within ±30% of the value at 20°C
	Impedance ratio (max.)	4 (120Hz)
Endurance (105°C) (Applied ripple current)	Test time	2000 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
Applicable standards	Voltage application treatment JIS C5101-1, -4 1998 (IEC 60384-1 1992, -4 1985)	

Outline Drawing

Unit : mm



Part numbering system
series LAT, standard terminal type :400V220μF

LAT	—	400 V	221	M	S52 #	B
Series code	Rated voltage symbol	Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	Optional symbol	

series LTT, three terminals type :400V220μF

LTT	—	400 V	221	M	S52 #	B
Series code	Rated voltage symbol	Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	Optional symbol	

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
315 or more	0.77	1	1.30	1.41	1.43

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 φDXL (mm)	Item Casing Symbol	160		180		200		250		350		400		450		500	
		Rated capacitance (μF)	Rated ripple current (Arms)	Rated capacitance (μF)	Rated ripple current (Arms)	Rated capacitance (μF)	Rated ripple current (Arms)	Rated capacitance (μF)	Rated ripple current (Arms)	Rated capacitance (μF)	Rated ripple current (Arms)	Rated capacitance (μF)	Rated ripple current (Arms)	Rated capacitance (μF)	Rated ripple current (Arms)	Rated capacitance (μF)	Rated ripple current (Arms)
22×20	S21	270	1.00	220	0.91	180	0.82	150	0.75	82	0.55	68	0.58	56	0.53	39	0.44
		330	1.10	270	1.00	220	0.91	180	0.82	100	0.61	82	0.64	68	0.58	47	0.48
		390	1.20	330	1.11	270	1.00	220	0.91	120	0.67	100	0.70	82	0.64	56	0.53
22×25	S22	390	1.35	330	1.25	330	1.29	220	1.11	100	0.69	82	0.71	68	0.65	56	0.59
		470	1.48	390	1.35	390	1.35	270	1.13	120	0.75	100	0.79	82	0.71	68	0.65
		560	1.61	470	1.49	470	1.49	—	—	150	0.84	120	0.86	120	0.86	82	0.71
22×30	S23	470	1.56	470	1.55	390	1.57	270	1.33	150	0.88	120	0.90	100	0.82	68	0.68
		560	1.68	560	1.69	470	1.67	330	1.47	180	0.96	150	1.01	150	1.01	82	0.74
		680	1.85	680	1.86	560	1.69	390	1.49	220	1.06	180	1.10	—	—	100	0.82
22×35	S24	680	1.93	560	1.73	560	1.73	330	1.50	180	0.98	150	1.03	120	0.92	100	0.84
		820	2.08	680	1.90	680	1.90	390	1.52	220	1.08	180	1.13	180	1.13	120	0.92
		—	—	820	2.09	—	—	470	1.58	270	1.20	220	1.25	—	—	—	—
22×40	S25	820	2.17	820	2.17	680	1.97	470	1.64	270	1.24	220	1.29	150	1.07	120	0.95
		1000	2.38	1000	2.39	820	2.17	560	1.79	330	1.37	270	1.43	220	1.29	150	1.07
		1000	2.42	1000	2.44	820	2.21	560	1.82	270	1.27	220	1.32	180	1.19	150	1.09
22×45	S26	1200	2.66	1200	2.67	1000	2.44	680	2.01	330	1.40	270	1.46	270	1.46	180	1.19
		—	—	—	—	—	—	—	—	390	1.52	330	1.61	—	—	—	—
		1200	2.84	1200	2.74	1200	2.74	680	2.06	390	1.56	270	1.50	220	1.35	180	1.22
22×50	S27	1500	3.05	—	—	—	—	820	2.27	—	—	—	—	—	—	220	1.35
		330	1.25	270	1.14	270	1.14	180	1.01	100	0.69	82	0.72	68	0.66	47	0.55
		390	1.36	330	1.26	330	1.26	220	1.12	120	0.76	100	0.80	82	0.72	56	0.60
25×20	S31	470	1.49	470	1.50	390	1.37	270	1.14	150	0.85	120	0.87	100	0.80	68	0.66
		470	1.59	470	1.56	390	1.52	270	1.33	150	0.88	120	0.75	100	0.84	68	0.68
		560	1.74	560	1.70	470	1.67	330	1.47	180	0.97	150	1.01	120	0.91	82	0.75
25×25	S32	680	1.86	680	1.88	560	1.70	390	1.50	220	1.07	180	1.11	150	1.01	100	0.83
		680	1.91	560	1.74	560	1.70	390	1.55	180	0.99	150	1.01	120	0.93	82	0.77
		820	2.09	680	1.91	680	1.87	470	1.61	220	1.09	180	1.11	150	1.03	100	0.85
25×30	S33	1000	2.35	820	2.10	—	—	—	—	270	1.18	220	1.23	180	1.13	120	0.93
		820	2.17	820	2.14	680	1.95	470	1.68	270	1.23	220	1.28	180	1.16	120	0.95
		1000	2.40	1000	2.37	820	2.14	560	1.77	330	1.36	270	1.42	220	1.28	150	1.05
25×35	S34	1200	2.58	—	—	820	1.91	—	—	—	—	270	1.10	—	—	—	—
		1200	2.84	1000	2.43	820	2.20	560	1.82	330	1.40	270	1.45	220	1.31	150	1.08
		—	—	1200	2.67	1000	2.43	680	2.01	390	1.52	330	1.61	270	1.45	180	1.19
25×40	S35	1500	3.25	1200	2.73	1000	2.49	680	2.06	390	1.56	330	1.65	220	1.37	180	1.22
		—	—	1500	3.06	1200	2.73	820	2.26	470	1.71	390	1.79	270	1.49	220	1.35
		—	—	—	—	—	—	—	—	—	—	390	1.40	330	1.65	—	—
25×45	S36	1500	3.38	1500	3.26	1200	2.92	820	2.42	470	1.83	390	1.91	270	1.59	220	1.44
		1800	3.70	—	—	1500	3.26	1000	2.66	560	1.99	470	2.10	—	—	270	1.59
		470	1.50	470	1.50	390	1.37	270	1.14	150	0.85	120	0.87	100	0.80	68	0.66
30×20	S41	560	1.63	560	1.64	470	1.50	330	1.26	180	0.93	150	0.98	120	0.87	82	0.72
		680	1.80	680	1.81	560	1.64	390	1.37	220	1.03	180	1.07	150	0.98	100	0.80
		680	1.85	680	1.86	560	1.75	390	1.47	220	1.06	180	1.10	150	1.00	100	0.82
30×25	S42	820	2.03	820	2.04	680	1.92	470	1.61	270	1.17	220	1.22	180	1.10	120	0.90
		1000	2.24	1000	2.25	820	2.04	560	1.69	330	1.29	270	1.35	220	1.22	150	1.00
		1000	2.60	820	2.17	820	2.17	560	1.80	270	1.24	220	1.06	180	1.15	120	0.95
30×30	S43	1200	2.84	1000	2.39	1000	2.39	680	1.98	330	1.37	270	1.43	220	1.27	150	1.07
		1500	2.91	1200	2.62	—	—	—	—	390	1.49	330	1.58	270	1.43	180	1.17
		1200	2.96	1200	2.66	1000	2.43	680	2.04	390	1.52	330	1.61	270	1.45	180	1.19
30×35	S44	1500	3.10	1500	2.98	1200	2.45	820	2.24	470	1.67	390	1.75	330	1.61	220	1.31
		1800	3.40	—	—	1200	2.66	1000	2.43	—	—	—	—	—	—	—	—
		1800	3.52	1500	3.01	1200	2.69	1000	2.60	470	1.69	390	1.77	330	1.62	220	1.33
30×40	S45	2200	3.89	1800	3.30	1500	3.01	1200	2.61	560	1.84	470	1.94	390	1.77	270	1.47
		2200	4.32	1800	3.42	1500	3.12	1200	3.00	560	1.91	470	2.01	330	1.68	270	1.52
		—	—	2200	3.78	1800	3.42	—	—	680	2.10	560	2.19	390	1.83	330	1.68
30×45	S46	—	—	—	—	—	—	—	—	—	—	—	—	470	2.01	—	—
		2700	4.59	2200	3.91	1800	3.54	1200	3.00	680	2.18	560	2.27	390	2.07	330	1.74
		—	—	—	—	2200	3.91	1500	3.03	820	2.39	680	2.50	470	2.22	390	1.90
35×20	S51	680	2.01	560	1.66	560	1.82	390	1.41	180	0.94	150	0.99	120	0.89	100	0.81
		820	2.20	680	1.83	680	2.01	470	1.55	220	1.04	180	1.08	150	0.99	120	0.89
		1000	2.21	820	2.01	820	2.01	560	1.66	270	1.15	220	1.20	180	1.08	150	0.99
35×25	S52	1000	2.60	820	2.11	820	2.42	560	1.80	270	1.19	220	1.08	180	1.12	150	1.02
		1200	2.84	1000	2.33	1000	2.67	680	1.98	330	1.31	270	1.37	220	1.23	180	1.12
		1500	2.78	1200	2.55	1200	2.50	820	2.07	390	1.43	330	1.51	270	1.37	220	1.23
35×30	S53	1500	3.06	1200	2.65	1000	2.65	680	2.04	390	1.51	330	1.20	270	1.50	180	1.15
		1800	3.35	1500	2.96	1200	2.90	820	2.24	470	1.66	390	1.69	330	1.66	220	1.27
		—	—	1800	3.25	1500	2.96	1000	2.47	560	1.81	470	1.86	—	—	270	1.41
35×35	S54	1800	3.52	1500	3.02	1500	2.97	1000	2.60	470	1.69	390	1.54	330	1.62	270	1.46
		2200	3.89	1800	3.31	1800	3.25	1200	2.78	560	1.85	470	1.93	390	1.76	330	1.62
		—	—	2200	3.66	—	—	—	—	680	2.04	560	2.11	470	1.93	—	—
35×40	S55	2200	4.36	2200	3.73	1800	3.78	1200	2.80	680	2.07	560	2.16	390	2.00	330	1.66
		2700	4.83	2700	4.13	2200	3.73	1500	2.82	820	2.28</						