



LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

TLG Series

• 105°C 3,000Hrs assured.

- Non-solvent proof
- High Ripple, Low Temp.
- For SMPS, Inverter.
- RoHS compliant.
- Halogen-free capacitors are also available.
- AEC-Q200 compliant : Please contact us for more details, test data, information.

TLA

TLG

High Ripple, Low Temp.



SPECIFICATIONS

Item	Characteristics											
Rated Voltage Range	160 ~ 500 V _{DC}											
Operating Temperature Range	-40 ~ +105°C											
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)											
Leakage Current	I = 3 √CV (μA) Where, I:Leakage Current(μA), C:Nominal capacitance(μF), V:Rated voltage(V _{DC}) (at 20°C, 5minutes)											
※ Dissipation Factor(Tanδ)	<table><tr><td>Rated voltage(V_{DC})</td><td>160 ~ 400</td><td>450 ~ 500</td></tr><tr><td>Tanδ(Max.)</td><td>0.15</td><td>0.20</td></tr></table> (at 20°C, 120Hz)			Rated voltage(V _{DC})	160 ~ 400	450 ~ 500	Tanδ(Max.)	0.15	0.20			
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Temperature Characteristics (Max. Impedance ratio)	<table><tr><td>Rated voltage(V_{DC})</td><td>160 ~ 400</td><td>450 ~ 500</td></tr><tr><td>Z(-25°C)/Z(20°C)</td><td>4</td><td>8</td></tr><tr><td>Z(-40°C)/Z(20°C)</td><td>8</td><td>16</td></tr></table> (at 120Hz)			Rated voltage(V _{DC})	160 ~ 400	450 ~ 500	Z(-25°C)/Z(20°C)	4	8	Z(-40°C)/Z(20°C)	8	16
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Z(-25°C)/Z(20°C)	4	8										
Z(-40°C)/Z(20°C)	8	16										
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 3,000 hours at 105°C Capacitance change ≤ ±20% of the initial value Tanδ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value											
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the exposing them at 105°C for 1,000hours without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≤ ±20% of the initial value Tanδ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value											
Others	Satisfied characteristics KS C IEC 60384-4											

※ For capacitors with CV products > 100,000 higher Tanδ value may apply.

When the capacitance exceeds 1,000μF, 0.01 shall be added every 1,000μF increase.

RATED RIPPLE CURRENT

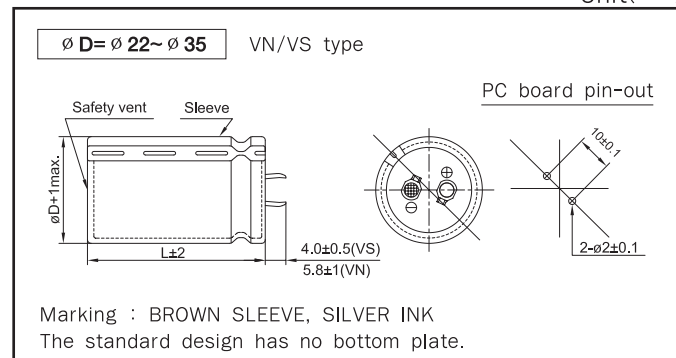
When capacitor are operated in any other condition at 120Hz, the maximum ripple current must be multiplied by the figure shown in the table.

Frequency multiplying factor

V _{DC}	Freq.(Hz)	60	120	300	1k	10k~
160~250		0.81	1.00	1.17	1.32	1.45
350~500		0.77	1.00	1.16	1.30	1.41

DIMENSIONS OF TLG Series

Unit(mm)



RATINGS OF TLG Series

V _{DC}	Capacitance (μF)	øD×L(mm)	Rated Ripple Current (Arms/105°C,120Hz)	V _{DC}	Capacitance (μF)	øD×L(mm)	Rated Ripple Current (Arms/105°C,120Hz)
160	330	22×25	1.20	350	100	22×25	0.73
	470	22×30	1.47		150	22×30	0.91
		25,4×25	1.46			25,4×25	0.91
	560	22×35	1.66		180	22×35	1.03
	680	22×40	1.87		220	22×40	1.16
		25,4×30	1.82			25,4×30	1.14
		30×25	1.85			30×25	1.16
	820	22×45	2.11		270	22×50	1.36
		25,4×35	2.06			25,4×40	1.33
	1,000	22×50	2.31			30×30	1.33
		25,4×40	2.28			35×25	1.34
		30×30	2.27		330	25,4×45	1.52
		35×25	2.29		25,4×50	1.69	
	1,200	25,4×45	2.57		390	30×35	1.65
		30×35	2.57			35×30	1.68
	1,500	30×40	2.96			470	30×40
35×30		2.91	35×35	1.91			
1,800	30×45	3.34	560	30×50	2.16		
	35×35	3.30	35×40	2.15			
2,200	35×45	3.78	680	35×45	2.44		
2,700	35×50	4.07	820	35×50	2.76		
200	270	22×25	1.15	400	100	22×25	0.73
	390	22×30	1.43		120	22×30	0.82
		25,4×25	1.42			25,4×25	0.81
	470	22×35	1.60		150	22×35	0.94
		22×40	1.80			22×40	1.05
	560	25,4×30	1.75		180	25,4×30	1.03
		30×25	1.80			30×25	1.05
	680	22×45	2.04			220	22×45
		25,4×35	1.99		25,4×35		1.17
	820	22×50	2.17		270	22×50	1.36
		25,4×40	2.26			25,4×40	1.33
		30×30	2.26			30×30	1.33
		35×25	2.27			35×25	1.34
	1,000	25,4×50	2.48		330	25,4×45	1.52
		30×35	2.49			30×35	1.52
	1,200	30×40	2.81		390	25,4×50	1.69
35×30		2.77	30×40	1.70			
1,500	30×50	3.23	35×30	1.68			
	35×40	3.32	470	30×45	1.93		
1,800	35×45	3.75	35×35	1.91			
2,200	35×50	4.01	560	30×50	2.16		
250	180	22×25	0.97	35×40	2.15		
	270	22×30	1.23	680	35×45	2.44	
		25,4×25	1.22	820	35×50	2.76	
	330	22×35	1.39	450	68	22×25	0.57
	390	22×40	1.55		100	22×30	0.71
		25,4×30	1.51			25,4×25	0.71
		30×25	1.54		120	22×35	0.80
	470	22×45	1.75		150	22×40	0.92
		25,4×35	1.71			25,4×30	0.90
	560	22×50	1.96			30×25	0.92
		25,4×40	1.92		180	22×45	1.04
		30×30	1.91			25,4×35	1.01
		35×25	1.93		220	25,4×40	1.15
	680	25,4×50	2.24			30×30	1.15
		30×35	2.18			35×25	1.16
		35×30	2.22		270	25,4×50	1.35
820	30×40	2.47	30×40			1.36	
	35×35	2.52	35×30			1.34	
1,000	30×50	2.89	330		30×45	1.55	
	35×40	2.87		35×35	1.53		
1,200	35×45	3.25	390	30×50	1.73		
1,500	35×50	3.73		35×40	1.72		

RATINGS OF TLG Series

V _{DC}	Capacitance (μ F)	ϕ D $\times$ L(mm)	Rated Ripple Current (A _{rms} /105°C, 120Hz)
450	470	35 $\times$ 45	1.95
	560	35 $\times$ 50	2.18
500	47	22 $\times$ 25	0.43
	56	22 $\times$ 30	0.52
		25.4 $\times$ 25	0.50
	68	22 $\times$ 35	0.60
	82	22 $\times$ 40	0.65
		25.4 $\times$ 30	0.67
		30 $\times$ 25	0.72
	100	22 $\times$ 45	0.74
		25.4 $\times$ 35	0.77
	120	22 $\times$ 50	0.85
		25.4 $\times$ 40	0.85
		30 $\times$ 30	0.86
		35 $\times$ 25	0.88
	150	25.4 $\times$ 45	0.98
		30 $\times$ 35	0.97
	180	25.4 $\times$ 50	1.12
		30 $\times$ 40	1.13
		35 $\times$ 30	1.15
	220	30 $\times$ 45	1.22
		35 $\times$ 35	1.24
	270	30 $\times$ 50	1.34
		35 $\times$ 40	1.37
	330	35 $\times$ 45	1.62
	390	35 $\times$ 50	1.84