

## 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.



## SPECIFICATIONS

Item	Characteristics											
Rated Voltage Range	160 ~ 500 V <sub>dc</sub>											
Operating Temperature Range	-40 ~ +105°C											
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)											
Leakage Current	$I = 3\sqrt{CV} (\mu A)$ Where, I: Leakage Current(μA), C: Nominal capacitance(μF), V: Rated voltage(V <sub>dc</sub> ) (at 20°C, 5minutes)											
※ Dissipation Factor(Tanδ)	<table border="1"> <tr> <td>Rated voltage(V<sub>dc</sub>)</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 <sub>dc</sub> )	160~400	450~500	Tanδ(Max.)	0.15	0.20			
Rated voltage(V <sub>dc</sub> )	160~400	450~500										
Tanδ(Max.)	0.15	0.20										
Temperature Characteristics (Max. Impedance ratio)	<table border="1"> <tr> <td>Rated voltage(V<sub>dc</sub>)</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 <sub>dc</sub> )	160~400	450~500	Z(-25°C)/Z(20°C)	4	8	Z(-40°C)/Z(20°C)	8	16
Rated voltage(V <sub>dc</sub> )	160~400	450~500										
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

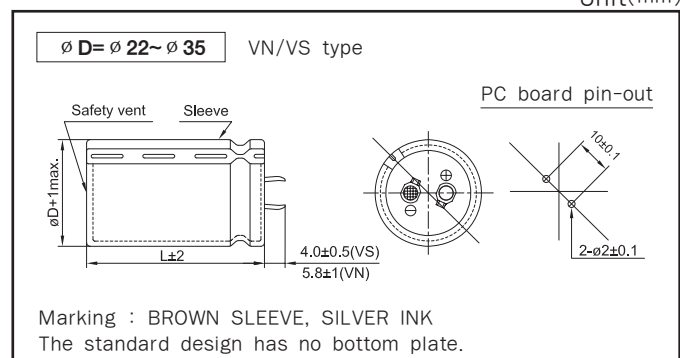
When capacitor are operated in any other condition at 120Hz, the maximum ripple current must be multiplied by the figure shown in the table.

Frequency multiplying factor

V <sub>dc</sub>	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

VDC	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/105°C, 120Hz)	VDC	Capacitance (μF)	∅D×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		180	25.4 × 25	0.91
	560	22 × 35	1.66			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
		22 × 50	2.31			30 × 30	1.33
	1,000	25.4 × 40	2.28		330	35 × 25	1.34
		30 × 30	2.27			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	1.87
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		150	25.4 × 25	0.81
	470	22 × 35	1.60			22 × 35	0.94
	560	22 × 40	1.80		180	22 × 40	1.05
		25.4 × 30	1.75			25.4 × 30	1.03
	680	30 × 25	1.80		30 × 25	1.05	
		22 × 45	2.04		220	22 × 45	1.20
	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
	1,000	35 × 25	2.27		330	35 × 25	1.34
		25.4 × 50	2.48			25.4 × 45	1.52
	1,200	30 × 35	2.49		390	30 × 35	1.52
		30 × 40	2.81			25.4 × 50	1.69
1,500	35 × 30	2.77	470	30 × 40	1.70		
	30 × 50	3.23		35 × 30	1.68		
1,800	35 × 40	3.32	560	30 × 45	1.93		
	35 × 45	3.75		35 × 35	1.91		
2,200	35 × 50	4.01	680	30 × 50	2.16		
250	180	22 × 25	0.97	450	68	22 × 25	0.57
	270	22 × 30	1.23		100	22 × 30	0.71
		25.4 × 25	1.22		120	25.4 × 25	0.71
	330	22 × 35	1.39			22 × 35	0.80
	390	22 × 40	1.55		150	22 × 40	0.92
		25.4 × 30	1.51			25.4 × 30	0.90
	470	30 × 25	1.54		180	30 × 25	0.92
		22 × 45	1.75			22 × 45	1.04
	560	25.4 × 35	1.71		220	25.4 × 35	1.01
		22 × 50	1.96			25.4 × 40	1.15
		25.4 × 40	1.92			30 × 30	1.15
	680	30 × 30	1.91		270	35 × 25	1.16
		35 × 25	1.93			25.4 × 50	1.35
		25.4 × 50	2.24			30 × 40	1.36
	820	30 × 35	2.18		330	35 × 30	1.34
		35 × 30	2.22			30 × 45	1.55
30 × 40		2.47	35 × 35	1.53			
1,000	35 × 35	2.52	390	30 × 50	1.73		
	30 × 50	2.89		35 × 40	1.72		
1,200	35 × 40	2.87					
1,500	35 × 45	3.25					
	35 × 50	3.73					

RATINGS OF TLG Series

VDC	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/105°C, 120Hz)
450	470	35 × 45	1.95
	560	35 × 50	2.18
500	47	22 × 25	0.43
		22 × 30	0.52
	56	25.4 × 25	0.50
		22 × 35	0.60
	68	22 × 40	0.65
		25.4 × 30	0.67
		30 × 25	0.72
	100	22 × 45	0.74
		25.4 × 35	0.77
	120	22 × 50	0.85
		25.4 × 40	0.85
		30 × 30	0.86
		35 × 25	0.88
	150	25.4 × 45	0.98
		30 × 35	0.97
	180	25.4 × 50	1.12
		30 × 40	1.13
		35 × 30	1.15
	220	30 × 45	1.22
		35 × 35	1.24
270	30 × 50	1.34	
	35 × 40	1.37	
330	35 × 45	1.62	
390	35 × 50	1.84	