

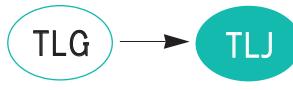


# LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

## TLJ Series

- 105°C 3,000Hrs assured.

- Non-solvent proof
- High Ripple, Low Temp.
- For SMPS, Inverter.
- RoHS compliant.
- Halogen-free capacitors are also available.



## SPECIFICATIONS

Item	Characteristics		
Rated Voltage Range	400 ~ 500 V <sub>dc</sub>		
Operating Temperature Range	-40 ~ +105°C		
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)		
Leakage Current	I = 3 $\sqrt{CV}$ or 3mA, Whichever is smaller. Where, I:Leakage Current(μA), C:Nominal capacitance(μF), V:Rated voltage(V <sub>dc</sub> ) (at 20°C, 5minutes)		
*Dissipation Factor(Tanδ)	Rated voltage(V <sub>dc</sub> )	400	420~500
	Tanδ(Max.)	0.15	0.20
(at 20°C, 120Hz)			
Temperature Characteristics (Max. Impedance ratio)	Rated voltage(V <sub>dc</sub> )	400	420~500
	Z(-25°C)/Z(20°C)	4	8
	Z(-40°C)/Z(20°C)	8	16
(at 120Hz)			
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

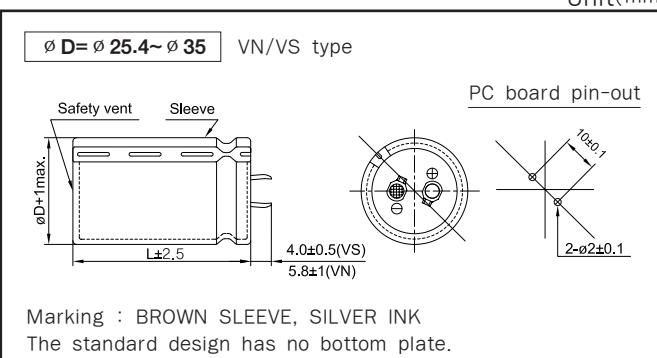
When capacitor are operated in any other condition at 120Hz, the maximum ripple current must be multiplied by the figure shown in the table.

Frequency multiplying factor

V <sub>dc</sub>	Freq.(Hz)	60	120	300	1k	10k~
400~500		0.77	1.00	1.16	1.30	1.41

## DIMENSIONS OF TLJ Series

Unit(mm)



## RATINGS OF TLJ Series

VDC	Capacitance ( $\mu$ F)	$\phi D \times L$ (mm)	Rated Ripple Current (Arms/105°C, 120Hz)	VDC	Capacitance ( $\mu$ F)	$\phi D \times L$ (mm)	Rated Ripple Current (Arms/105°C, 120Hz)
400	120	25.4 × 25	1.05	450	100	25.4 × 25	0.92
		25.4 × 30	1.34		150	25.4 × 35	1.17
	180	30 × 25	1.37		180	30 × 25	1.20
	220	25.4 × 35	1.52		220	25.4 × 40	1.31
		25.4 × 40	1.73			25.4 × 45	1.50
	270	30 × 30	1.73			30 × 35	1.50
		35 × 25	1.74			35 × 25	1.51
		25.4 × 50	1.98			25.4 × 50	1.76
	330	30 × 35	1.96			30 × 40	1.77
		35 × 30	1.96			35 × 30	1.74
		30 × 40	2.21			30 × 45	2.02
	390	35 × 35	2.20			35 × 35	1.99
		30 × 50	2.61			30 × 50	2.25
	470	35 × 40	2.58			35 × 40	2.24
		35 × 45	3.07			35 × 45	2.54
	560	35 × 50	3.39			35 × 50	2.83
420	100	25.4 × 25	0.92	500	56	25.4 × 25	0.66
		25.4 × 30	1.10		68	25.4 × 25	0.69
	150	30 × 25	1.20		82	25.4 × 30	0.87
	180	25.4 × 35	1.24			30 × 25	0.94
		25.4 × 40	1.43		100	25.4 × 35	1.00
	220	30 × 30	1.43			25.4 × 40	1.11
		35 × 25	1.44		120	30 × 30	1.12
		25.4 × 45	1.69			35 × 25	1.14
	270	30 × 35	1.70		150	30 × 35	1.26
		35 × 30	1.74			25.4 × 50	1.45
	330	30 × 40	1.95		180	30 × 40	1.47
		30 × 45	2.18			35 × 30	1.50
	390	35 × 35	2.17		220	30 × 45	1.59
		30 × 50	2.55			35 × 35	1.61
	470	35 × 45	2.54		270	35 × 40	1.73
	560	35 × 50	2.83		330	35 × 50	1.89