TLK Series

• 105℃ 3,000Hrs assured.

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

TLJ → TLK

High Ripple

SPECIFICATIONS

Item	Characteristics
Rated Voltage Range	400 ~ 500 V_{DC}
Operating Temperature Range	-40 ~ +105℃
Capacitance Tolerance	±20%(M) (at 20℃, 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_{DC}) (at 20℃, 5minutes)
※Dissipation Factor(Tanδ)	Rated voltage(V_{DC}): 400 — 0.15; 420~500 — 0.20 Tanδ(Max.) (at 20℃, 120Hz)
Temperature Characteristics (Max. Impedance ratio)	Rated voltage(V_{DC}): 400 — 420~500 Z(-25℃)/Z(20℃): 4 — 8 Z(-40℃)/Z(20℃): 8 — 16 (at 120Hz)
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ 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℃ 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℃ after the exposing them at 105℃ 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

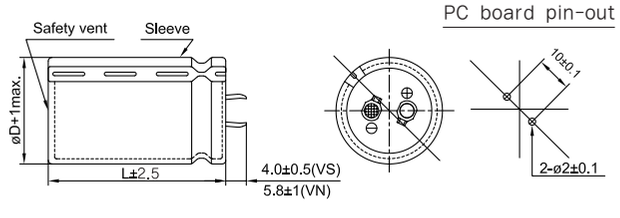
V_{DC} \ Freq.(Hz)	60	120	300	1k	10k~
400~500	0.77	1.00	1.16	1.30	1.41

DIMENSIONS OF TLK Series

Unit(mm)

ø D= ø 25.4~ ø 35 VN/VS type

PC board pin-out



Marking : BROWN SLEEVE, SILVER INK
The standard design has no bottom plate.

RATINGS OF TLK Series

VDC	Capacitance (μF)	øD×L(mm)	Rated Ripple Current (Arms/105℃,120Hz)
400	120	25.4×25	1.16
	180	25.4×30	1.47
		30×25	1.51
	220	25.4×35	1.67
	270	25.4×40	1.90
		30×30	1.90
		35×25	1.91
	330	25.4×50	2.18
		30×35	2.16
		35×30	2.16
	390	30×40	2.43
		35×35	2.42
	470	30×50	2.87
		35×40	2.83
	560	35×45	3.37
	680	35×50	3.73
420	100	25.4×25	1.10
	150	25.4×30	1.32
		30×25	1.44
	180	25.4×35	1.48
	220	25.4×40	1.71
		30×30	1.71
		35×25	1.72
	270	25.4×45	2.01
		30×35	2.01
	330	35×30	2.09
		30×40	2.34
	390	30×45	2.61
		35×35	2.60
	470	30×50	3.06
		35×45	3.05
	560	35×50	3.40

VDC	Capacitance (μF)	øD×L(mm)	Rated Ripple Current (Arms/105℃,120Hz)
450	100	25.4×25	1.01
	150	25.4×35	1.28
		30×25	1.32
	180	25.4×40	1.46
	220	25.4×45	1.63
		30×35	1.63
		35×25	1.61
	270	25.4×50	1.91
		30×40	1.89
		35×30	1.86
	330	30×45	2.26
		35×35	2.13
	390	30×50	2.42
		35×40	2.41
	470	35×45	2.58
	560	35×50	2.85
500	56	25.4×25	0.74
	68	25.4×25	0.78
	82	25.4×30	0.98
		30×25	1.05
	100	25.4×35	1.12
	120	25.4×40	1.24
		30×30	1.25
		35×25	1.27
	150	30×35	1.51
	180	25.4×50	1.62
		30×40	1.64
		35×30	1.68
	220	30×45	1.78
		35×35	1.80
	270	35×40	1.93
	330	35×50	2.27