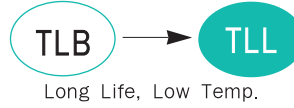


TLL Series

• 105°C 10,000Hrs assured.

- Non-solvent proof.
- Long Life.
- For SMPS, Inverter.
- RoHS compliant.
- Halogen-free capacitors are also available.



SPECIFICATIONS

Item	Characteristics		
Rated Voltage Range	200 ~ 500 V _{DC}		
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 _{DC}) (at 20°C, 5minutes)		
*Dissipation Factor(Tanδ)	Rated voltage(V _{DC})	200 ~ 500	
	Tanδ(Max.)	0.20 (at 20°C, 120Hz)	
Temperature Characteristics (Max. Impedance ratio)	Rated voltage(V _{DC})	200~400	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 is applied for 10,000 hours at 105°C. Capacitance change ≤ ±25% of the initial value Tanδ ≤ 300% 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

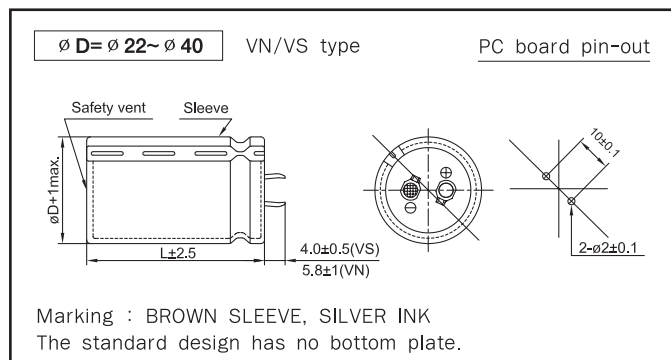
When capacitors are operated in any other conditions at 120Hz the maximum ripple current must be multiplied by the figure shown in the table.

Frequency multiplying factor

V _{DC}	Freq.(Hz)	60	120	300	1k	10k~
200~250V _{DC}		0.81	1.00	1.17	1.32	1.45
350~500V _{DC}		0.77	1.00	1.16	1.30	1.41

DIMENSIONS OF TLL Series

Unit(mm)



RATINGS OF TLL Series

V _{DC}	Capacitance (μF)	øD×L(mm)	Rated Ripple Current (Arms/105°C,120Hz)
200	270	25,4 × 25	1,01
	390	25,4 × 30	1,24
	470	25,4 × 35	1,40
	560	25,4 × 40	1,55
		30 × 30	1,63
	680	25,4 × 50	1,87
		30 × 35	1,80
	820	30 × 40	2,01
		35 × 30	2,01
	1000	30 × 45	2,29
		35 × 35	2,29
		40 × 30	2,25
	1200	35 × 40	2,58
		40 × 35	2,51
250	330	35 × 50	3,01
		40 × 50	3,33
	390	25,4 × 30	1,15
		25,4 × 35	1,29
	470	30 × 30	1,32
		25,4 × 40	1,49
	560	30 × 35	1,51
		25,4 × 50	1,70
	680	35 × 30	1,69
		30 × 45	1,97
	820	35 × 35	1,92
		30 × 50	2,03
		35 × 40	2,01
400	1000	40 × 35	1,96
		35 × 45	2,30
	1200	40 × 40	2,55
		35 × 50	2,60
	1500	40 × 50	3,21
	100	25,4 × 25	0,63
		25,4 × 30	0,84
		25,4 × 35	0,97
		25,4 × 40	1,11
	270	25,4 × 50	1,25
		30 × 35	1,25
		35 × 30	1,26
	330	30 × 40	1,29
		35 × 35	1,46
	390	30 × 45	1,58
		40 × 30	1,53
	470	35 × 40	1,76
		40 × 35	1,76
	560	35 × 50	2,01
		40 × 40	2,02
	680	40 × 50	2,29
	820	40 × 60	2,61

V _{DC}	Capacitance (μF)	øD×L(mm)	Rated Ripple Current (Arms/105°C,120Hz)
450	100	25,4 × 25	0,59
	120	25,4 × 30	0,68
	150	25,4 × 35	0,81
	180	25,4 × 40	0,93
		25,4 × 45	1,08
	220	30 × 40	1,20
		35 × 30	1,17
		30 × 45	1,21
	270	35 × 35	1,19
		30 × 50	1,40
	330	35 × 40	1,52
	390	35 × 50	1,79
	470	40 × 60	2,19
500	68	25,4 × 30	0,33
	82	25,4 × 35	0,37
	100	30 × 30	0,41
		25,4 × 45	0,47
	120	30 × 35	0,47
		30 × 40	0,54
	150	35 × 30	0,55
		30 × 45	0,61
	180	35 × 35	0,62
		35 × 40	0,71
	220	35 × 50	0,83
	270		