

Snap-in Type

Series: **EE** Type: **TS**

■ Features

- Endurance : 105 °C 3000 h
- Miniaturize (Maximum Ripple Current) Low profile
- RoHS directive compliant



■ Specifications

Category Temp. Range	-40 °C to +105 °C	-25 °C to +105 °C
Rated W.V. Range	200 V.DC, 250 V.DC	400 V.DC, 450 V.DC
Nominal Cap. Range	220 μF to 1800 μF	75 μF to 560 μF
Capacitance Tolerance	±20 % (120 Hz/+20 °C)	
DC Leakage Current	3√CV (μA) max. After 5 minutes application of rated working voltage at +20 °C C : Capacitance (μF) V: W.V. (V.DC)	
tan δ	Please see the attached standard products list	
Endurance	After 3000 hours application of DC voltage with specified ripple current (≤ rated DC working voltage) at +105 °C±2 °C, the capacitors shall meet the following limits.	
	Capacitance change	≤ ±20 % of initial measured value
	tan δ	≤ 200 % of initial specified value
	DC leakage current	≤ initial specified value
Shelf Life	After storage for 1000 hours at +105 °C±2 °C within no voltage applied and then being stabilized at +20 °C, capacitors shall meet the limits specified in Endurance. (With voltage treatment)	

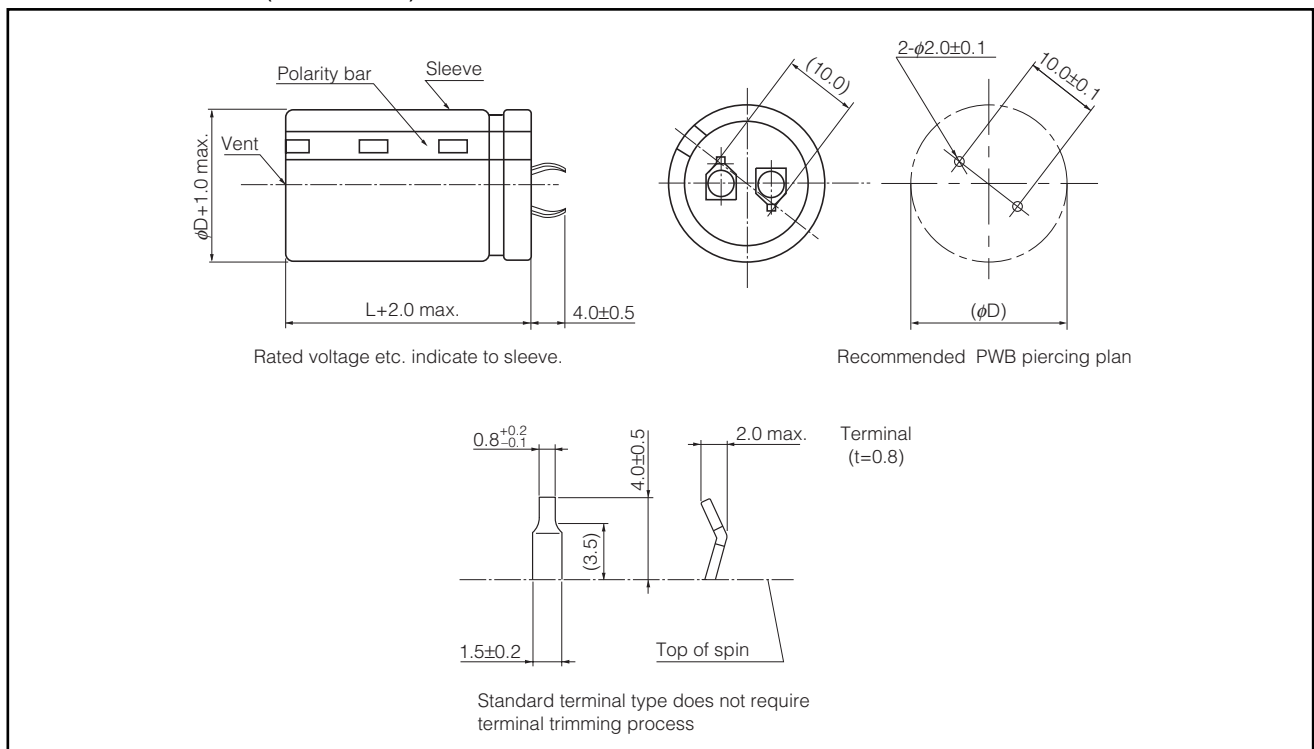
* A formula to calculate estimated lifetime of TS-EE Series is different from other series. Please contact us.

■ Frequency correction factor for ripple current

Rated Voltage	Frequency (Hz)						
	50	60	100	120	500	1 k	10 k to
200V.DC, 250V.DC	0.75	0.80	0.95	1.00	1.20	1.25	1.30
400V.DC, 450V.DC	0.75	0.80	0.95	1.00	1.20	1.25	1.40

■ Dimensions in mm (not to scale)

(Unit : mm)



Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

00 Nov. 2012

Standard Products

Endurance : 105 °C 3000 h

W.V. (V. DC)	Cap. (120 Hz) (±20 %) (μF)	Case size		Part No. PET sleeve Terminal Length 4.0 mm (Without Top Plate)	Specification		Min. Packaging Q'ty (pcs)
		Dia. (mm)	Length (mm)		Ripple Current (120 Hz) (+105 °C) (A r.m.s.)	tan δ (120 Hz) (+20 °C) max.	
200	300	22	25	EETEE2D301HJ	1.70	0.15	200
	390	22	30	EETEE2D391HJ	2.17	0.15	200
	470	22	35	EETEE2D471HJ	2.22	0.15	200
	590	22	40	EETEE2D591HJ	2.30	0.15	200
		25	30	EETEE2D591JJ	2.30	0.15	200
	700	22	45	EETEE2D701HJ	2.65	0.15	200
		25	35	EETEE2D701JJ	2.65	0.15	200
	590	30	25	EETEE2D591KJ	3.08	0.15	200
	800	22	50	EETEE2D801HJ	3.08	0.15	200
		25	40	EETEE2D801JJ	3.08	0.15	200
		30	30	EETEE2D801KJ	3.48	0.15	200
		35	25	EETEE2D801LJ	3.48	0.15	200
	1000	25	50	EETEE2D102JJ	3.48	0.15	200
		30	35	EETEE2D102KJ	3.98	0.15	100
		35	30	EETEE2D102LJ	4.20	0.15	200
	1200	30	40	EETEE2D122KJ	4.20	0.15	100
	1300	30	45	EETEE2D132KJ	4.62	0.15	100
	1500	35	40	EETEE2D152LJ	4.62	0.15	100
30		50	EETEE2D152KJ	5.22	0.15	100	
*	1800	35	45	EETEE2D182LJ	5.22	0.15	100
250	220	22	25	EETEE2E221HJ	1.43	0.15	200
	300	22	30	EETEE2E301HJ	1.56	0.15	200
		25	25	EETEE2E301JJ	1.70	0.15	200
	370	22	35	EETEE2E371HJ	1.70	0.15	200
	420	22	40	EETEE2E421HJ	1.82	0.15	200
		25	30	EETEE2E421JJ	1.82	0.15	200
		30	25	EETEE2E421KJ	2.20	0.15	200
	520	22	45	EETEE2E521HJ	2.00	0.15	200
		25	35	EETEE2E521JJ	2.00	0.15	200
	590	22	50	EETEE2E591HJ	2.30	0.15	200
		25	40	EETEE2E591JJ	2.30	0.15	200
		30	30	EETEE2E591KJ	2.50	0.15	200
		35	25	EETEE2E591LJ	2.50	0.15	200
	730	25	45	EETEE2E731JJ	2.70	0.15	200
		30	35	EETEE2E731KJ	3.00	0.15	100
		35	30	EETEE2E731LJ	3.00	0.15	200
	860	30	40	EETEE2E861KJ	3.30	0.15	100
	1000	30	45	EETEE2E102KJ	3.45	0.15	100
*	1300	35	45	EETEE2E132LJ	3.75	0.15	100
*	1500	35	50	EETEE2E152LJ	4.05	0.15	100

* When capacitors of $\phi 35 \times 45L$ and $\phi 35 \times 50L$ are mounted on PWB, reinforce them with mounting clamp or adhesives.
(Avoid using adhesives including halogenated compositions.)

Standard Products

Endurance : 105 °C 3000 h

W.V. (V. DC)	Cap. (120 Hz) (±20 %) (μF)	Case size		Part No. PET sleeve Terminal Length 4.0 mm (Without Top Plate)	Specification		Min. Packaging Q'ty (pcs)
		Dia. (mm)	Length (mm)		Ripple Current (120 Hz) (+105 °C) (A r.m.s.)	tan δ (120 Hz) (+20 °C) max.	
400	100	22	25	EETEE2G101HJ	0.95	0.15	200
	120	22	30	EETEE2G121HJ	1.22	0.15	200
	150	22	35	EETEE2G151HJ	1.33	0.15	200
	180	25	30	EETEE2G181JJ	1.33	0.15	200
		30	25	EETEE2G181KJ	1.68	0.15	200
	220	22	45	EETEE2G221HJ	1.55	0.15	200
		25	35	EETEE2G221JJ	1.55	0.15	200
		30	30	EETEE2G221KJ	1.79	0.15	200
		35	25	EETEE2G221LJ	1.79	0.15	200
	270	22	50	EETEE2G271HJ	1.68	0.15	200
		25	40	EETEE2G271JJ	1.68	0.15	200
		30	35	EETEE2G271KJ	2.12	0.15	100
	320	25	45	EETEE2G321JJ	1.90	0.15	200
	330	30	40	EETEE2G331KJ	2.33	0.15	100
		35	30	EETEE2G331LJ	2.33	0.15	200
	370	25	50	EETEE2G371JJ	2.12	0.15	200
	390	30	45	EETEE2G391KJ	2.52	0.15	100
		35	35	EETEE2G391LJ	2.52	0.15	100
	470	30	50	EETEE2G471KJ	2.85	0.15	100
		35	40	EETEE2G471LJ	2.85	0.15	100
*	560	35	45	EETEE2G561LJ	3.18	0.15	100
450	75	22	25	EETEE2W750HJ	0.83	0.20	200
	100	22	30	EETEE2W101HJ	0.95	0.20	200
		25	25	EETEE2W101JJ	0.95	0.20	200
	120	22	35	EETEE2W121HJ	1.15	0.20	200
		25	30	EETEE2W121JJ	1.22	0.20	200
		30	25	EETEE2W121KJ	1.22	0.20	200
	150	22	40	EETEE2W151HJ	1.22	0.20	200
	180	22	45	EETEE2W181HJ	1.38	0.20	200
		25	40	EETEE2W181JJ	1.38	0.20	200
		30	30	EETEE2W181KJ	1.60	0.20	200
		35	25	EETEE2W181LJ	1.60	0.20	200
	220	25	45	EETEE2W221JJ	1.55	0.20	200
	250	35	30	EETEE2W251LJ	1.90	0.20	200
	270	25	50	EETEE2W271JJ	1.74	0.20	200
		30	40	EETEE2W271KJ	1.90	0.20	100
	300	35	35	EETEE2W301LJ	2.20	0.20	100
	330	30	45	EETEE2W331KJ	2.20	0.20	100
		35	40	EETEE2W331LJ	2.40	0.20	100
	390	30	50	EETEE2W391KJ	2.40	0.20	100
		35	45	EETEE2W391LJ	2.61	0.20	100
*	470	35	50	EETEE2W471LJ	2.85	0.20	100

* When capacitors of φ35×45L and φ35×50L are mounted on PWB, reinforce them with mounting clamp or adhesives. (Avoid using adhesives including halogenated compositions.)