

### Snap-in Type

Series: **XB** Type: **TS**

#### ■ Features

- Endurance : 105 °C 7000 h
- RoHS directive compliant

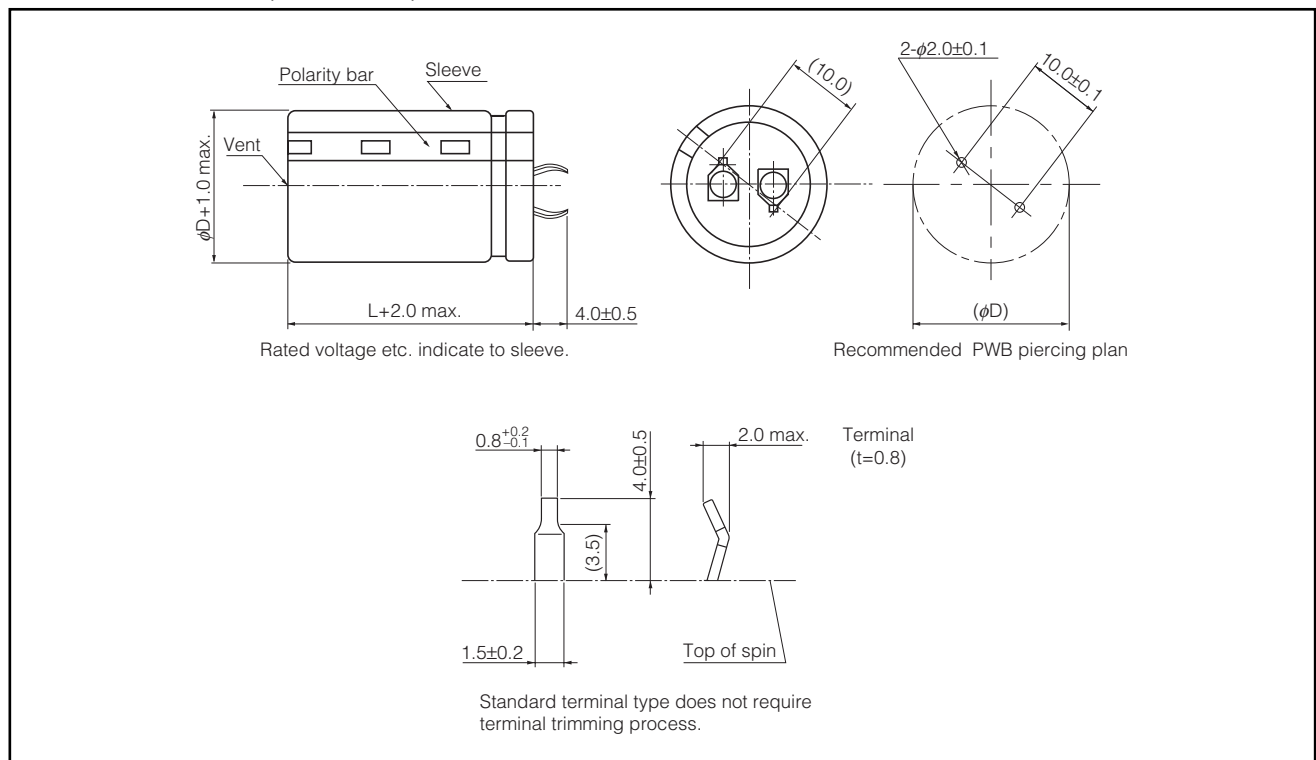


#### ■ Specifications

Category Temp. Range	-40 °C to +105 °C		-25 °C to +105 °C					
Rated W.V. Range	160 V.DC to 250 V.DC		315 V.DC to 450 V.DC					
Nominal Cap. Range	180 μF to 2200 μF		39 μF to 680 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							
Frequency Correction Factor for Ripple Current	Frequency (Hz)	50	60	100	120	500	1 k	10 k to
	Correction Factor	0.75	0.80	0.95	1.00	1.20	1.25	1.40
Endurance	After 7000 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, capacitor shall meet the limits specified in Endurance (With voltage treatment)							

#### ■ Dimensions in mm (not to scale)

(mm)



### ■ Standard Products

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.	
160	270	22	25	EETXB2C271HJ	1.10	0.15	200
	330	22	30	EETXB2C331HJ	1.20	0.15	200
	390	22	30	EETXB2C391HJ	1.30	0.15	200
		25	25	EETXB2C391JJ	1.30	0.15	200
	470	22	35	EETXB2C471HJ	1.40	0.15	200
		25	30	EETXB2C471JJ	1.40	0.15	200
	560	22	40	EETXB2C561HJ	1.50	0.15	200
		25	30	EETXB2C561JJ	1.50	0.15	200
		30	25	EETXB2C561KJ	1.50	0.15	200
	680	22	45	EETXB2C681HJ	1.70	0.15	200
		25	35	EETXB2C681JJ	1.70	0.15	200
		30	30	EETXB2C681KJ	1.70	0.15	200
	820	25	40	EETXB2C821JJ	2.00	0.15	200
		30	30	EETXB2C821KJ	2.00	0.15	200
	1000	25	45	EETXB2C102JJ	2.20	0.15	200
		30	35	EETXB2C102KJ	2.20	0.15	100
	1200	25	50	EETXB2C122JJ	2.30	0.15	200
		30	40	EETXB2C122KJ	2.30	0.15	100
		35	35	EETXB2C122LJ	2.30	0.15	100
	1500	30	45	EETXB2C152KJ	2.50	0.15	100
35		35	EETXB2C152LJ	2.50	0.15	100	
1800	30	50	EETXB2C182KJ	2.70	0.15	100	
	35	40	EETXB2C182LJ	2.70	0.15	100	
*	2200	35	50	EETXB2C222LJ	2.90	0.15	100
180	220	22	25	EETXB2P221HJ	1.00	0.15	200
	270	22	25	EETXB2P271HJ	1.10	0.15	200
	330	22	30	EETXB2P331HJ	1.20	0.15	200
		25	25	EETXB2P331JJ	1.20	0.15	200
	390	22	30	EETXB2P391HJ	1.30	0.15	200
		25	25	EETXB2P391JJ	1.30	0.15	200
	470	22	35	EETXB2P471HJ	1.40	0.15	200
		25	30	EETXB2P471JJ	1.40	0.15	200
		30	25	EETXB2P471KJ	1.40	0.15	200
	560	22	40	EETXB2P561HJ	1.50	0.15	200
		25	35	EETXB2P561JJ	1.50	0.15	200
		30	25	EETXB2P561KJ	1.50	0.15	200
	680	22	50	EETXB2P681HJ	1.70	0.15	200
		25	40	EETXB2P681JJ	1.70	0.15	200
		30	30	EETXB2P681KJ	1.70	0.15	200
	820	25	45	EETXB2P821JJ	2.00	0.15	200
		30	35	EETXB2P821KJ	2.00	0.15	100
		35	30	EETXB2P821LJ	2.00	0.15	200
	1000	30	40	EETXB2P102KJ	2.20	0.15	100
		35	30	EETXB2P102LJ	2.20	0.15	200
1200	30	45	EETXB2P122KJ	2.30	0.15	100	
	35	35	EETXB2P122LJ	2.30	0.15	100	
1500	30	50	EETXB2P152KJ	2.50	0.15	100	
	35	40	EETXB2P152LJ	2.50	0.15	100	
*	1800	35	45	EETXB2P182LJ	2.70	0.15	100
*	2200	35	50	EETXB2P222LJ	2.90	0.15	100

Endurance : 105 °C 7000 h, Terminal Pitch : 10 mm

\* 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.)

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.

### ■ Standard Products

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	220	22	25	EETXB2D221HJ	1.00	0.15	200
	270	22	30	EETXB2D271HJ	1.10	0.15	200
		25	25	EETXB2D271JJ	1.10	0.15	200
	330	22	30	EETXB2D331HJ	1.20	0.15	200
		25	25	EETXB2D331JJ	1.20	0.15	200
	390	22	35	EETXB2D391HJ	1.30	0.15	200
		25	30	EETXB2D391JJ	1.30	0.15	200
		30	25	EETXB2D391KJ	1.30	0.15	200
	470	22	40	EETXB2D471HJ	1.40	0.15	200
		25	35	EETXB2D471JJ	1.40	0.15	200
		30	30	EETXB2D471KJ	1.40	0.15	200
	560	22	45	EETXB2D561HJ	1.50	0.15	200
		25	35	EETXB2D561JJ	1.50	0.15	200
		30	30	EETXB2D561KJ	1.50	0.15	200
	680	25	40	EETXB2D681JJ	1.70	0.15	200
		30	35	EETXB2D681KJ	1.70	0.15	100
	820	25	50	EETXB2D821JJ	2.00	0.15	200
		30	40	EETXB2D821KJ	2.00	0.15	100
		35	30	EETXB2D821LJ	2.00	0.15	200
	1000	30	45	EETXB2D102KJ	2.20	0.15	100
35		35	EETXB2D102LJ	2.20	0.15	100	
1200	30	50	EETXB2D122KJ	2.30	0.15	100	
	35	40	EETXB2D122LJ	2.30	0.15	100	
*	1500	35	50	EETXB2D152LJ	2.50	0.15	100
250	180	22	30	EETXB2E181HJ	0.90	0.15	200
		25	25	EETXB2E181JJ	0.90	0.15	200
	220	22	30	EETXB2E221HJ	1.00	0.15	200
		25	25	EETXB2E221JJ	1.00	0.15	200
	270	22	35	EETXB2E271HJ	1.10	0.15	200
		25	30	EETXB2E271JJ	1.10	0.15	200
		30	25	EETXB2E271KJ	1.10	0.15	200
	330	22	40	EETXB2E331HJ	1.20	0.15	200
		25	35	EETXB2E331JJ	1.20	0.15	200
		30	25	EETXB2E331KJ	1.20	0.15	200
	390	22	45	EETXB2E391HJ	1.30	0.15	200
		25	35	EETXB2E391JJ	1.30	0.15	200
		30	30	EETXB2E391KJ	1.30	0.15	200
	470	25	45	EETXB2E471JJ	1.40	0.15	200
		30	35	EETXB2E471KJ	1.40	0.15	100
		35	30	EETXB2E471LJ	1.40	0.15	200
	560	25	50	EETXB2E561JJ	1.50	0.15	200
		30	35	EETXB2E561KJ	1.50	0.15	100
		35	30	EETXB2E561LJ	1.50	0.15	200
	680	30	45	EETXB2E681KJ	1.70	0.15	100
35		35	EETXB2E681LJ	1.70	0.15	100	
820	30	50	EETXB2E821KJ	2.00	0.15	100	
	35	40	EETXB2E821LJ	2.00	0.15	100	
*	1000	35	45	EETXB2E102LJ	2.20	0.15	100
*	1200	35	50	EETXB2E122LJ	2.30	0.15	100

Endurance : 105 °C 7000 h, Terminal Pitch : 10 mm

\* 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.)

### Standard Products

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.	
315	82	22	25	EETXB2F820HJ	0.64	0.15	200
	100	22	30	EETXB2F101HJ	0.69	0.15	200
	120	22	30	EETXB2F121HJ	0.75	0.15	200
		25	25	EETXB2F121JJ	0.75	0.15	200
	150	22	35	EETXB2F151HJ	0.82	0.15	200
		25	30	EETXB2F151JJ	0.82	0.15	200
		30	25	EETXB2F151KJ	0.82	0.15	200
	180	22	40	EETXB2F181HJ	0.90	0.15	200
		25	35	EETXB2F181JJ	0.90	0.15	200
		30	25	EETXB2F181KJ	0.90	0.15	200
	220	22	45	EETXB2F221HJ	1.00	0.15	200
		25	40	EETXB2F221JJ	1.00	0.15	200
		30	30	EETXB2F221KJ	1.00	0.15	200
	270	25	45	EETXB2F271JJ	1.10	0.15	200
		30	35	EETXB2F271KJ	1.10	0.15	100
		35	30	EETXB2F271LJ	1.10	0.15	200
	330	25	50	EETXB2F331JJ	1.20	0.15	200
		30	40	EETXB2F331KJ	1.20	0.15	100
		35	30	EETXB2F331LJ	1.20	0.15	200
	390	30	45	EETXB2F391KJ	1.30	0.15	100
35		35	EETXB2F391LJ	1.30	0.15	100	
470	30	50	EETXB2F471KJ	1.40	0.15	100	
	35	40	EETXB2F471LJ	1.40	0.15	100	
*	560	35	45	EETXB2F561LJ	1.50	0.15	100
*	680	35	50	EETXB2F681LJ	1.70	0.15	100
350	82	22	25	EETXB2V820HJ	0.64	0.15	200
	100	22	30	EETXB2V101HJ	0.69	0.15	200
		25	25	EETXB2V101JJ	0.69	0.15	200
	120	22	35	EETXB2V121HJ	0.75	0.15	200
		25	30	EETXB2V121JJ	0.75	0.15	200
	150	22	40	EETXB2V151HJ	0.82	0.15	200
		25	30	EETXB2V151JJ	0.82	0.15	200
		30	25	EETXB2V151KJ	0.82	0.15	200
	180	22	45	EETXB2V181HJ	0.90	0.15	200
		25	35	EETXB2V181JJ	0.90	0.15	200
		30	30	EETXB2V181KJ	0.90	0.15	200
	220	22	50	EETXB2V221HJ	1.00	0.15	200
		25	40	EETXB2V221JJ	1.00	0.15	200
		30	30	EETXB2V221KJ	1.00	0.15	200
	270	25	50	EETXB2V271JJ	1.10	0.15	200
		30	35	EETXB2V271KJ	1.10	0.15	100
		35	30	EETXB2V271LJ	1.10	0.15	200
330	30	45	EETXB2V331KJ	1.20	0.15	100	
	35	35	EETXB2V331LJ	1.20	0.15	100	
390	30	50	EETXB2V391KJ	1.30	0.15	100	
	35	40	EETXB2V391LJ	1.30	0.15	100	
470	35	40	EETXB2V471LJ	1.40	0.15	100	
*	560	35	50	EETXB2V561LJ	1.50	0.15	100

Endurance : 105 °C 7000 h, Terminal Pitch : 10 mm

\* 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.)

### Standard Products

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	56	22	25	EETXB2G560HJ	0.51	0.15	200
	68	22	30	EETXB2G680HJ	0.56	0.15	200
		25	25	EETXB2G680JJ	0.56	0.15	200
	82	22	35	EETXB2G820HJ	0.64	0.15	200
		25	25	EETXB2G820JJ	0.64	0.15	200
	100	22	35	EETXB2G101HJ	0.69	0.15	200
		25	30	EETXB2G101JJ	0.69	0.15	200
	120	22	40	EETXB2G121HJ	0.75	0.15	200
		25	35	EETXB2G121JJ	0.75	0.15	200
		30	25	EETXB2G121KJ	0.75	0.15	200
	150	22	50	EETXB2G151HJ	0.82	0.15	200
		25	40	EETXB2G151JJ	0.82	0.15	200
		30	30	EETXB2G151KJ	0.82	0.15	200
	180	25	45	EETXB2G181JJ	0.90	0.15	200
		30	35	EETXB2G181KJ	0.90	0.15	100
		35	25	EETXB2G181LJ	0.90	0.15	200
	220	25	50	EETXB2G221JJ	1.00	0.15	200
		30	40	EETXB2G221KJ	1.00	0.15	100
		35	30	EETXB2G221LJ	1.00	0.15	200
	270	30	45	EETXB2G271KJ	1.10	0.15	100
35		35	EETXB2G271LJ	1.10	0.15	100	
330	30	50	EETXB2G331KJ	1.20	0.15	100	
	35	40	EETXB2G331LJ	1.20	0.15	100	
*	390	35	45	EETXB2G391LJ	1.30	0.15	100
*	470	35	50	EETXB2G471LJ	1.40	0.15	100
450	39	22	25	EETXB2W390HJ	0.37	0.15	200
	47	22	30	EETXB2W470HJ	0.40	0.15	200
	56	22	35	EETXB2W560HJ	0.47	0.15	200
		25	25	EETXB2W560JJ	0.47	0.15	200
	68	22	40	EETXB2W680HJ	0.53	0.15	200
		25	30	EETXB2W680JJ	0.53	0.15	200
	82	22	45	EETXB2W820HJ	0.56	0.15	200
		25	35	EETXB2W820JJ	0.56	0.15	200
		30	25	EETXB2W820KJ	0.56	0.15	200
	100	22	50	EETXB2W101HJ	0.64	0.15	200
		25	40	EETXB2W101JJ	0.64	0.15	200
		30	30	EETXB2W101KJ	0.64	0.15	200
	120	25	45	EETXB2W121JJ	0.72	0.15	200
		30	30	EETXB2W121KJ	0.72	0.15	200
	150	25	50	EETXB2W151JJ	0.79	0.15	200
		30	40	EETXB2W151KJ	0.79	0.15	100
		35	30	EETXB2W151LJ	0.79	0.15	200
	180	30	45	EETXB2W181KJ	0.87	0.15	100
		35	35	EETXB2W181LJ	0.87	0.15	100
	220	30	50	EETXB2W221KJ	1.00	0.15	100
35		40	EETXB2W221LJ	1.00	0.15	100	
*	270	35	45	EETXB2W271LJ	1.19	0.15	100
*	330	35	50	EETXB2W331LJ	1.38	0.15	100

Endurance : 105 °C 7000 h, Terminal Pitch : 10 mm

\* 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.)