

### Snap-in Type

Series: **HC** Type: **TS**



#### ■ Features

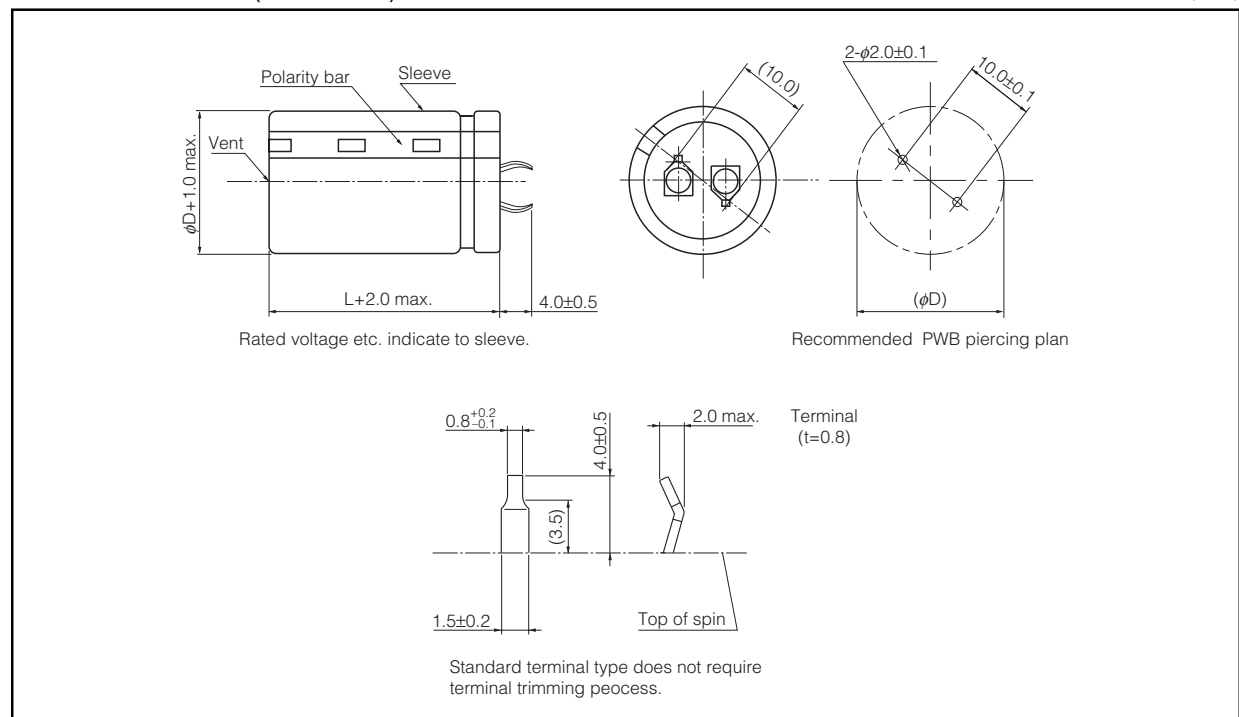
- Endurance : 105 °C 2000 h
- 30 % smaller than series TS-HB
- RoHS directive compliant

#### ■ Specifications

Category Temp. Range	-40 °C to +105 °C			-25 °C to +105 °C					
Rated W.V. Range	10 V.DC to 100 V.DC	160 V.DC to 250 V.DC			315 V.DC to 450 V.DC				
Nominal Cap. Range	820 μF to 100000 μF	150 μF to 3300 μF			39 μF to 1000 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	
	10 V.DC to 100 V.DC /C.F.	0.93	0.95	0.99	1.00	1.05	1.08	1.15	
	160 V.DC to 450 V.DC /C.F.	0.75	0.80	0.95	1.00	1.20	1.25	1.40	
Endurance	After 2000 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							
Shelf Life	DC leakage current ≤ initial specified value								
	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)								

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

(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 Sep. 2010

### 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.	
10	12000	22	25	EETHC1A123HJ	2.20	0.65	200
	15000	22	30	EETHC1A153HJ	2.30	0.65	200
	18000	22	30	EETHC1A183HJ	2.40	0.65	200
		25	25	EETHC1A183JJ	2.40	0.65	200
	22000	22	35	EETHC1A223HJ	2.60	0.65	200
		25	30	EETHC1A223JJ	2.60	0.65	200
	27000	22	40	EETHC1A273HJ	3.10	0.65	200
		25	35	EETHC1A273JJ	3.10	0.65	200
		30	25	EETHC1A273KJ	3.10	0.65	200
	33000	22	45	EETHC1A333HJ	3.40	0.65	200
		25	40	EETHC1A333JJ	3.40	0.65	200
	39000	25	45	EETHC1A393JJ	3.70	0.71	200
		30	30	EETHC1A393KJ	3.70	0.71	200
		35	25	EETHC1A393LJ	3.70	0.71	200
	47000	25	50	EETHC1A473JJ	4.20	0.79	200
		30	35	EETHC1A473KJ	4.20	0.79	100
		35	30	EETHC1A473LJ	4.20	0.79	200
	56000	30	40	EETHC1A563KJ	5.00	0.88	100
		35	35	EETHC1A563LJ	5.00	0.88	100
	68000	30	45	EETHC1A683KJ	5.40	1.00	100
35		40	EETHC1A683LJ	5.40	1.00	100	
*	82000	35	45	EETHC1A823JJ	5.90	1.14	100
*	100000	35	50	EETHC1A104LJ	6.50	1.32	100
16	10000	22	25	EETHC1C103HJ	2.60	0.55	200
	12000	22	30	EETHC1C123HJ	2.90	0.55	200
		25	25	EETHC1C123JJ	2.90	0.55	200
	15000	22	35	EETHC1C153HJ	3.20	0.55	200
	18000	22	40	EETHC1C183HJ	3.50	0.55	200
		25	30	EETHC1C183JJ	3.50	0.55	200
	22000	22	45	EETHC1C223HJ	3.80	0.55	200
		25	35	EETHC1C223JJ	3.80	0.55	200
		30	25	EETHC1C223KJ	3.80	0.55	200
	27000	22	50	EETHC1C273HJ	4.20	0.55	200
		25	40	EETHC1C273JJ	4.20	0.55	200
		30	30	EETHC1C273KJ	4.20	0.55	200
		35	25	EETHC1C273LJ	4.20	0.55	200
	33000	25	45	EETHC1C333JJ	4.70	0.55	200
		30	35	EETHC1C333KJ	4.70	0.55	100
	39000	30	40	EETHC1C393KJ	5.10	0.61	100
		35	30	EETHC1C393LJ	5.10	0.61	200
	47000	30	45	EETHC1C473KJ	5.50	0.69	100
		35	35	EETHC1C473LJ	5.50	0.69	100
	56000	30	50	EETHC1C563KJ	6.00	0.78	100
35		40	EETHC1C563LJ	6.00	0.78	100	
*	68000	35	45	EETHC1C683LJ	6.40	0.90	100

Endurance : 105 °C 2000 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.	
25	6800	22	25	EETHC1E682HJ	2.40	0.40	200
	8200	22	30	EETHC1E822HJ	2.70	0.40	200
		25	25	EETHC1E822JJ	2.70	0.40	200
	10000	22	35	EETHC1E103HJ	3.00	0.40	200
	12000	22	40	EETHC1E123HJ	3.20	0.40	200
		25	30	EETHC1E123JJ	3.20	0.40	200
	15000	22	45	EETHC1E153HJ	3.60	0.40	200
		25	35	EETHC1E153JJ	3.60	0.40	200
		30	25	EETHC1E153KJ	3.60	0.40	200
	18000	22	50	EETHC1E183HJ	3.90	0.40	200
		25	40	EETHC1E183JJ	3.90	0.40	200
		30	30	EETHC1E183KJ	3.90	0.40	200
		35	25	EETHC1E183LJ	3.90	0.40	200
	22000	25	45	EETHC1E223JJ	4.30	0.40	200
		30	35	EETHC1E223KJ	4.30	0.40	100
		35	30	EETHC1E223LJ	4.30	0.40	200
	27000	30	40	EETHC1E273KJ	4.80	0.40	100
		35	35	EETHC1E273LJ	4.80	0.40	100
	33000	30	45	EETHC1E333KJ	5.50	0.40	100
		35	40	EETHC1E333LJ	5.50	0.40	100
39000	30	50	EETHC1E393KJ	5.80	0.46	100	
	35	45	EETHC1E393LJ	5.80	0.46	100	
*	47000	35	50	EETHC1E473LJ	6.30	0.54	100
35	4700	22	25	EETHC1V472HJ	2.20	0.35	200
	5600	22	30	EETHC1V562HJ	2.40	0.35	200
		25	25	EETHC1V562JJ	2.40	0.35	200
	6800	22	35	EETHC1V682HJ	2.60	0.35	200
	8200	22	40	EETHC1V822HJ	2.90	0.35	200
		25	30	EETHC1V822JJ	2.90	0.35	200
	10000	22	45	EETHC1V103HJ	3.20	0.35	200
		25	35	EETHC1V103JJ	3.20	0.35	200
		30	25	EETHC1V103KJ	3.20	0.35	200
	12000	22	50	EETHC1V123HJ	3.50	0.35	200
		25	40	EETHC1V123JJ	3.50	0.35	200
		30	30	EETHC1V123KJ	3.50	0.35	200
		35	25	EETHC1V123LJ	3.50	0.35	200
	15000	25	45	EETHC1V153JJ	3.90	0.35	200
		30	35	EETHC1V153KJ	3.90	0.35	100
		35	30	EETHC1V153LJ	3.90	0.35	200
	18000	30	40	EETHC1V183KJ	4.30	0.35	100
		35	35	EETHC1V183LJ	4.30	0.35	100
	22000	30	45	EETHC1V223KJ	5.00	0.35	100
		35	40	EETHC1V223LJ	5.00	0.35	100
27000	30	50	EETHC1V273KJ	5.30	0.35	100	
	35	45	EETHC1V273LJ	5.30	0.35	100	
*	33000	35	50	EETHC1V333LJ	5.90	0.35	100

Endurance : 105 °C 2000 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.	
50	2700	22	25	EETHC1H272HJ	1.80	0.35	200
	3300	22	30	EETHC1H332HJ	2.00	0.35	200
	3900	22	35	EETHC1H392HJ	2.20	0.35	200
		25	25	EETHC1H392JJ	2.20	0.35	200
	4700	22	40	EETHC1H472HJ	2.50	0.35	200
		25	30	EETHC1H472JJ	2.50	0.35	200
	5600	22	45	EETHC1H562HJ	2.80	0.35	200
		25	35	EETHC1H562JJ	2.80	0.35	200
		30	25	EETHC1H562KJ	2.80	0.35	200
	6800	22	50	EETHC1H682HJ	3.30	0.35	200
		25	40	EETHC1H682JJ	3.30	0.35	200
		30	30	EETHC1H682KJ	3.30	0.35	200
		35	25	EETHC1H682LJ	3.30	0.35	200
	8200	25	45	EETHC1H822JJ	3.60	0.35	200
		30	35	EETHC1H822KJ	3.60	0.35	100
	10000	25	50	EETHC1H103JJ	4.00	0.35	200
		30	40	EETHC1H103KJ	4.00	0.35	100
		35	30	EETHC1H103LJ	4.00	0.35	200
	12000	30	45	EETHC1H123KJ	4.50	0.35	100
		35	35	EETHC1H123LJ	4.50	0.35	100
15000	30	50	EETHC1H153KJ	4.80	0.35	100	
	35	40	EETHC1H153LJ	4.80	0.35	100	
*	18000	35	45	EETHC1H183LJ	5.20	0.35	100
63	2200	22	25	EETHC1J222HJ	2.00	0.30	200
	2700	22	30	EETHC1J272HJ	2.20	0.30	200
		25	25	EETHC1J272JJ	2.20	0.30	200
	3300	22	35	EETHC1J332HJ	2.50	0.30	200
	3900	22	40	EETHC1J392HJ	2.70	0.30	200
		25	30	EETHC1J392JJ	2.70	0.30	200
		30	25	EETHC1J392KJ	2.70	0.30	200
	4700	22	45	EETHC1J472HJ	3.00	0.30	200
		25	35	EETHC1J472JJ	3.00	0.30	200
	5600	22	50	EETHC1J562HJ	3.30	0.30	200
		25	40	EETHC1J562JJ	3.30	0.30	200
		30	30	EETHC1J562KJ	3.30	0.30	200
		35	25	EETHC1J562LJ	3.30	0.30	200
	6800	25	45	EETHC1J682JJ	3.60	0.30	200
		30	35	EETHC1J682KJ	3.60	0.30	100
		35	30	EETHC1J682LJ	3.60	0.30	200
	8200	30	40	EETHC1J822KJ	3.90	0.30	100
		35	35	EETHC1J822LJ	3.90	0.30	100
	10000	30	45	EETHC1J103KJ	4.40	0.30	100
		35	40	EETHC1J103LJ	4.40	0.30	100
12000	30	50	EETHC1J123KJ	4.80	0.30	100	
	35	45	EETHC1J123LJ	4.80	0.30	100	
*	15000	35	50	EETHC1J153LJ	5.40	0.30	100

Endurance : 105 °C 2000 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.	
80	1200	22	25	EETHC1K122HJ	1.50	0.25	200
	1500	22	30	EETHC1K152HJ	1.70	0.25	200
		25	25	EETHC1K152JJ	1.70	0.25	200
	1800	22	35	EETHC1K182HJ	1.80	0.25	200
	2200	22	40	EETHC1K222HJ	2.10	0.25	200
		25	30	EETHC1K222JJ	2.10	0.25	200
	2700	22	45	EETHC1K272HJ	2.40	0.25	200
		25	35	EETHC1K272JJ	2.40	0.25	200
		30	25	EETHC1K272KJ	2.40	0.25	200
	3300	22	50	EETHC1K332HJ	2.60	0.25	200
		25	40	EETHC1K332JJ	2.60	0.25	200
		30	30	EETHC1K332KJ	2.60	0.25	200
		35	25	EETHC1K332LJ	2.60	0.25	200
	3900	25	45	EETHC1K392JJ	3.00	0.25	200
		30	35	EETHC1K392KJ	3.00	0.25	100
	4700	25	50	EETHC1K472JJ	3.30	0.25	200
		30	40	EETHC1K472KJ	3.30	0.25	100
		35	30	EETHC1K472LJ	3.30	0.25	200
	5600	30	45	EETHC1K562KJ	3.70	0.25	100
		35	35	EETHC1K562LJ	3.70	0.25	100
6800	30	50	EETHC1K682KJ	3.90	0.25	100	
	35	40	EETHC1K682LJ	3.90	0.25	100	
*	8200	35	45	EETHC1K822LJ	4.30	0.25	100
100	820	22	25	EETHC2A821HJ	1.40	0.25	200
	1000	22	30	EETHC2A102HJ	1.70	0.25	200
	1200	22	30	EETHC2A122HJ	1.80	0.25	200
		25	25	EETHC2A122JJ	1.80	0.25	200
	1500	22	35	EETHC2A152HJ	2.10	0.25	200
		25	30	EETHC2A152JJ	2.10	0.25	200
	1800	22	40	EETHC2A182HJ	2.30	0.25	200
		25	35	EETHC2A182JJ	2.30	0.25	200
		30	25	EETHC2A182KJ	2.30	0.25	200
	2200	22	45	EETHC2A222HJ	2.60	0.25	200
		25	40	EETHC2A222JJ	2.60	0.25	200
		30	30	EETHC2A222KJ	2.60	0.25	200
		35	25	EETHC2A222LJ	2.60	0.25	200
	2700	25	45	EETHC2A272JJ	2.90	0.25	200
		30	35	EETHC2A272KJ	2.90	0.25	100
	3300	25	50	EETHC2A332JJ	3.20	0.25	200
		30	40	EETHC2A332KJ	3.20	0.25	100
		35	30	EETHC2A332LJ	3.20	0.25	200
	3900	30	45	EETHC2A392KJ	3.60	0.25	100
		35	35	EETHC2A392LJ	3.60	0.25	100
4700	30	50	EETHC2A472KJ	3.80	0.25	100	
	35	40	EETHC2A472LJ	3.80	0.25	100	
*	5600	35	45	EETHC2A562LJ	4.10	0.25	100
*	6800	35	50	EETHC2A682LJ	4.50	0.25	100

Endurance : 105 °C 2000 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.	
160	470	22	25	EETHC2C471HJ	1.40	0.15	200
	560	22	30	EETHC2C561HJ	1.50	0.15	200
	680	22	30	EETHC2C681HJ	1.70	0.15	200
		25	25	EETHC2C681JJ	1.70	0.15	200
	820	22	35	EETHC2C821HJ	2.00	0.15	200
		25	30	EETHC2C821JJ	2.00	0.15	200
	1000	22	40	EETHC2C102HJ	2.20	0.15	200
		25	35	EETHC2C102JJ	2.20	0.15	200
		30	25	EETHC2C102KJ	2.20	0.15	200
	1200	22	45	EETHC2C122HJ	2.30	0.15	200
		25	40	EETHC2C122JJ	2.30	0.15	200
		30	30	EETHC2C122KJ	2.30	0.15	200
		35	25	EETHC2C122LJ	2.30	0.15	200
	1500	25	45	EETHC2C152JJ	2.50	0.15	200
		30	35	EETHC2C152KJ	2.50	0.15	100
		35	30	EETHC2C152LJ	2.50	0.15	200
	1800	25	50	EETHC2C182JJ	2.70	0.15	200
		30	40	EETHC2C182KJ	2.70	0.15	100
		35	30	EETHC2C182LJ	2.70	0.15	200
	2200	30	45	EETHC2C222KJ	2.90	0.15	100
35		35	EETHC2C222LJ	2.90	0.15	100	
2700	30	50	EETHC2C272KJ	3.10	0.15	100	
	35	40	EETHC2C272LJ	3.10	0.15	100	
*	3300	35	50	EETHC2C332LJ	3.30	0.15	100
180	470	22	25	EETHC2P471HC	1.45	0.15	200
	560	22	30	EETHC2P561HJ	1.50	0.15	200
		25	25	EETHC2P561JJ	1.50	0.15	200
	680	22	35	EETHC2P681HJ	1.70	0.15	200
		25	30	EETHC2P681JJ	1.70	0.15	200
	820	22	40	EETHC2P821HJ	2.00	0.15	200
		25	30	EETHC2P821JJ	2.00	0.15	200
		30	25	EETHC2P821KJ	2.00	0.15	200
	1000	22	45	EETHC2P102HJ	2.20	0.15	200
		25	40	EETHC2P102JJ	2.20	0.15	200
		30	30	EETHC2P102KJ	2.20	0.15	200
		35	25	EETHC2P102LJ	2.20	0.15	200
	1200	25	45	EETHC2P122JJ	2.30	0.15	200
		30	30	EETHC2P122KC	2.30	0.15	200
		30	35	EETHC2P122KJ	2.30	0.15	100
	1500	25	50	EETHC2P152JJ	2.50	0.15	200
		30	40	EETHC2P152KJ	2.50	0.15	100
		35	30	EETHC2P152LJ	2.50	0.15	200
	1800	30	45	EETHC2P182KJ	2.70	0.15	100
		35	35	EETHC2P182LJ	2.70	0.15	100
2200	30	50	EETHC2P222KJ	2.90	0.15	100	
	35	40	EETHC2P222LJ	2.90	0.15	100	
*	2700	35	50	EETHC2P272LJ	3.10	0.15	100

Endurance : 105 °C 2000 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.)

■ 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	390	22	25	EETHC2D391HJ	1.31	0.15	200
	470	22	30	EETHC2D471HJ	1.45	0.15	200
		25	25	EETHC2D471JC	1.45	0.15	200
	560	22	30	EETHC2D561HJ	1.67	0.15	200
		680	22	40	EETHC2D681HJ	1.75	0.15
	25		30	EETHC2D681JJ	1.75	0.15	200
	820	22	45	EETHC2D821HJ	2.04	0.15	200
		25	35	EETHC2D821JJ	2.04	0.15	200
		30	25	EETHC2D821KJ	2.04	0.15	200
	1000	22	50	EETHC2D102HJ	2.30	0.15	200
		25	40	EETHC2D102JC	2.30	0.15	200
		25	45	EETHC2D102JJ	2.30	0.15	200
		30	30	EETHC2D102KJ	2.30	0.15	200
		35	25	EETHC2D102LJ	2.30	0.15	200
	1200	25	45	EETHC2D122JC	2.65	0.15	200
		25	50	EETHC2D122JJ	2.65	0.15	200
		30	35	EETHC2D122KJ	2.65	0.15	100
	1500	35	30	EETHC2D122LJ	2.65	0.15	200
		30	40	EETHC2D152KJ	2.80	0.15	100
	1800	35	30	EETHC2D152LJ	2.80	0.15	200
30		45	EETHC2D182KJ	3.08	0.15	100	
2200	35	40	EETHC2D182LJ	3.08	0.15	100	
	30	50	EETHC2D222KJ	3.48	0.15	100	
*	35	45	EETHC2D222LJ	3.48	0.15	100	
220	270	22	25	EETHC2Q271HJ	1.10	0.15	200
	330	22	25	EETHC2Q331HJ	1.26	0.15	200
	390	22	30	EETHC2Q391HJ	1.34	0.15	200
		22	35	EETHC2Q471HJ	1.48	0.15	200
	470	25	25	EETHC2Q471JC	1.48	0.15	200
		25	30	EETHC2Q471JJ	1.48	0.15	200
	560	22	35	EETHC2Q561HC	1.67	0.15	200
		22	40	EETHC2Q561HJ	1.67	0.15	200
		25	30	EETHC2Q561JJ	1.67	0.15	200
	680	22	45	EETHC2Q681HC	1.78	0.15	200
		25	35	EETHC2Q681JJ	1.78	0.15	200
		30	25	EETHC2Q681KJ	1.78	0.15	200
		35	25	EETHC2Q681LJ	1.78	0.15	200
	820	22	50	EETHC2Q821HC	2.04	0.15	200
		25	40	EETHC2Q821JJ	2.04	0.15	200
		30	30	EETHC2Q821KJ	2.04	0.15	200
		35	25	EETHC2Q821LJ	2.04	0.15	200
	1000	25	45	EETHC2Q102JC	2.33	0.15	200
		25	50	EETHC2Q102JJ	2.33	0.15	200
		30	35	EETHC2Q102KJ	2.33	0.15	100
35		30	EETHC2Q102LJ	2.33	0.15	200	
1200	25	50	EETHC2Q122JC	2.65	0.15	200	
	30	40	EETHC2Q122KJ	2.65	0.15	100	
	35	35	EETHC2Q122LJ	2.65	0.15	100	
1500	30	45	EETHC2Q152KC	2.80	0.15	100	
	30	50	EETHC2Q152KJ	2.80	0.15	100	
	35	40	EETHC2Q152LJ	2.80	0.15	100	
1800	30	50	EETHC2Q182KC	3.11	0.15	100	
	35	45	EETHC2Q182LJ	3.11	0.15	100	
*	2200	35	50	EETHC2Q222LC	3.50	0.15	100

Endurance : 105 °C 2000 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.		
250	270	22	25	EETHC2E271HJ	1.10	0.15	200	
	330	22	30	EETHC2E331HJ	1.20	0.15	200	
		25	25	EETHC2E331JJ	1.20	0.15	200	
	390	22	30	EETHC2E391HC	1.30	0.15	200	
		22	35	EETHC2E391HJ	1.30	0.15	200	
		25	25	EETHC2E391JJ	1.30	0.15	200	
	470	22	35	EETHC2E471HC	1.40	0.15	200	
		22	40	EETHC2E471HJ	1.40	0.15	200	
		25	30	EETHC2E471JJ	1.40	0.15	200	
		30	25	EETHC2E471KJ	1.40	0.15	200	
	560	22	40	EETHC2E561HC	1.50	0.15	200	
		22	45	EETHC2E561HJ	1.50	0.15	200	
		25	35	EETHC2E561JJ	1.50	0.15	200	
		30	25	EETHC2E561KJ	1.50	0.15	200	
	680	22	45	EETHC2E681HC	1.70	0.15	200	
		22	50	EETHC2E681HJ	1.70	0.15	200	
		25	40	EETHC2E681JJ	1.70	0.15	200	
		30	30	EETHC2E681KJ	1.70	0.15	200	
		35	25	EETHC2E681LJ	1.70	0.15	200	
	820	25	45	EETHC2E821JJ	2.00	0.15	200	
		30	35	EETHC2E821KJ	2.00	0.15	100	
		35	30	EETHC2E821LJ	2.00	0.15	200	
	1000	25	50	EETHC2E102JC	2.20	0.15	200	
		30	40	EETHC2E102KJ	2.20	0.15	100	
		35	30	EETHC2E102LJ	2.20	0.15	200	
1200	30	45	EETHC2E122KJ	2.30	0.15	100		
	35	35	EETHC2E122LJ	2.30	0.15	100		
*	1500	35	45	EETHC2E152LJ	2.50	0.15	100	
*	1800	35	45	EETHC2E182LC	2.50	0.15	100	
*		35	50	EETHC2E182LJ	2.70	0.15	100	
315	150	22	25	EETHC2F151HJ	0.82	0.15	200	
	180	22	30	EETHC2F181HJ	0.90	0.15	200	
	220	22	30	EETHC2F221HJ	1.00	0.15	200	
	270	22	40	EETHC2F271HC	1.10	0.15	200	
		25	30	EETHC2F271JJ	1.10	0.15	200	
	330	22	45	EETHC2F331HJ	1.20	0.15	200	
		25	35	EETHC2F331JJ	1.20	0.15	200	
		30	25	EETHC2F331KJ	1.20	0.15	200	
	390	22	50	EETHC2F391HC	1.30	0.15	200	
		25	40	EETHC2F391JJ	1.30	0.15	200	
		30	30	EETHC2F391KJ	1.30	0.15	200	
		35	25	EETHC2F391LJ	1.30	0.15	200	
	470	25	45	EETHC2F471JJ	1.40	0.15	200	
		30	35	EETHC2F471KJ	1.40	0.15	100	
	560	25	50	EETHC2F561JJ	1.50	0.15	200	
		30	40	EETHC2F561KJ	1.50	0.15	100	
		35	30	EETHC2F561LJ	1.50	0.15	200	
	680	30	45	EETHC2F681KJ	1.70	0.15	100	
		35	35	EETHC2F681LJ	1.70	0.15	100	
	820	30	50	EETHC2F821KJ	2.00	0.15	100	
		35	40	EETHC2F821LJ	2.00	0.15	100	
	*	1000	35	45	EETHC2F102LJ	2.30	0.15	100

Endurance : 105 °C 2000 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.

00 Sep. 2010



### ■ 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.	
350	120	22	25	EETHC2V121HJ	0.75	0.15	200
	150	22	30	EETHC2V151HJ	0.82	0.15	200
	180	22	30	EETHC2V181HJ	0.90	0.15	200
		25	25	EETHC2V181JJ	0.90	0.15	200
	220	22	35	EETHC2V221HJ	1.00	0.15	200
		25	30	EETHC2V221JJ	1.00	0.15	200
	270	22	40	EETHC2V271HC	1.10	0.15	200
		25	35	EETHC2V271JJ	1.10	0.15	200
		30	25	EETHC2V271KJ	1.10	0.15	200
	330	22	45	EETHC2V331HC	1.20	0.15	200
		25	40	EETHC2V331JJ	1.20	0.15	200
		30	30	EETHC2V331KJ	1.20	0.15	200
	390	25	45	EETHC2V391JJ	1.30	0.15	200
		30	30	EETHC2V391KC	1.30	0.15	200
		30	35	EETHC2V391KJ	1.30	0.15	100
	470	25	50	EETHC2V471JJ	1.40	0.15	200
		30	35	EETHC2V471KC	1.40	0.15	100
		35	30	EETHC2V471LJ	1.40	0.15	200
	560	30	40	EETHC2V561KC	1.50	0.15	100
		30	45	EETHC2V561KJ	1.50	0.15	100
35		35	EETHC2V561LJ	1.50	0.15	100	
680	30	45	EETHC2V681KC	1.70	0.15	100	
	30	50	EETHC2V681KJ	1.70	0.15	100	
	35	40	EETHC2V681LJ	1.70	0.15	100	
*	820	35	45	EETHC2V821LJ	1.90	0.15	100
*	1000	35	50	EETHC2V102LC	1.90	0.15	100

Endurance : 105 °C 2000 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	100	22	25	EETHC2G101HJ	0.70	0.15	200
	120	22	30	EETHC2G121HJ	0.75	0.15	200
	150	22	30	EETHC2G151HJ	0.88	0.15	200
		25	25	EETHC2G151JC	0.88	0.15	200
	180	22	35	EETHC2G181HJ	0.95	0.15	200
		25	30	EETHC2G181JJ	0.95	0.15	200
	220	22	40	EETHC2G221HC	1.10	0.15	200
		22	45	EETHC2G221HJ	1.10	0.15	200
		25	35	EETHC2G221JJ	1.10	0.15	200
		30	25	EETHC2G221KJ	1.10	0.15	200
	270	22	45	EETHC2G271HC	1.22	0.15	200
		22	50	EETHC2G271HJ	1.22	0.15	200
		25	40	EETHC2G271JJ	1.22	0.15	200
		30	30	EETHC2G271KJ	1.22	0.15	200
	330	35	25	EETHC2G271LJ	1.22	0.15	200
		25	45	EETHC2G331JJ	1.44	0.15	200
		30	30	EETHC2G331KC	1.44	0.15	200
		30	35	EETHC2G331KJ	1.44	0.15	100
	390	35	30	EETHC2G331LJ	1.44	0.15	200
		25	50	EETHC2G391JJ	1.55	0.15	200
		30	35	EETHC2G391KC	1.55	0.15	100
		30	40	EETHC2G391KJ	1.55	0.15	100
	470	35	30	EETHC2G391LJ	1.55	0.15	200
		30	45	EETHC2G471KJ	1.68	0.15	100
	560	35	35	EETHC2G471LJ	1.68	0.15	100
		30	45	EETHC2G561KC	1.90	0.15	100
30		50	EETHC2G561KJ	1.90	0.15	100	
*	680	35	40	EETHC2G561LJ	1.90	0.15	100
*	820	35	50	EETHC2G821LJ	2.30	0.15	100

Endurance : 105 °C 2000 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.	
420	100	22	25	EETHC2S101HJ	0.70	0.15	200
	120	22	30	EETHC2S121HJ	0.74	0.15	200
		25	25	EETHC2S121JJ	0.74	0.15	200
	150	22	35	EETHC2S151HJ	0.84	0.15	200
		25	30	EETHC2S151JJ	0.84	0.15	200
	180	22	40	EETHC2S181HJ	0.91	0.15	200
		25	30	EETHC2S181JJ	0.91	0.15	200
		30	25	EETHC2S181KJ	0.91	0.15	200
	220	22	45	EETHC2S221HJ	1.05	0.15	200
		25	35	EETHC2S221JJ	1.05	0.15	200
		30	25	EETHC2S221KJ	1.05	0.15	200
	270	22	50	EETHC2S271HJ	1.20	0.15	200
		25	40	EETHC2S271JJ	1.20	0.15	200
		30	30	EETHC2S271KJ	1.20	0.15	200
		35	25	EETHC2S271LJ	1.20	0.15	200
	330	25	45	EETHC2S331JC	1.42	0.15	200
		25	50	EETHC2S331JJ	1.42	0.15	200
		30	35	EETHC2S331KJ	1.42	0.15	100
		35	35	EETHC2S331LJ	1.42	0.15	100
	390	30	40	EETHC2S391KJ	1.55	0.15	100
		35	30	EETHC2S391LC	1.55	0.15	200
		35	35	EETHC2S391LJ	1.55	0.15	100
	470	30	45	EETHC2S471KJ	1.71	0.15	100
		35	35	EETHC2S471LJ	1.71	0.15	100
560	30	50	EETHC2S561KJ	1.90	0.15	100	
	35	40	EETHC2S561LC	1.90	0.15	100	
	35	45	EETHC2S561LJ	1.90	0.15	100	
*	680	35	45	EETHC2S681LC	2.10	0.15	100
*		35	50	EETHC2S681LJ	2.10	0.15	100
*		35	50	EETHC2S681LJ	2.10	0.15	100

Endurance : 105 °C 2000 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.			
450	100	22	30	EETHC2W101HJ	0.64	0.20	200		
		25	25	EETHC2W101JJ	0.64	0.20	200		
	120	22	35	EETHC2W121HJ	0.72	0.20	200		
		25	30	EETHC2W121JJ	0.72	0.20	200		
	150	22	35	EETHC2W151HC	0.79	0.20	200		
			40	EETHC2W151HJ	0.79	0.20	200		
		25	30	EETHC2W151JJ	0.79	0.20	200		
	150	30	25	EETHC2W151KJ	0.79	0.20	200		
			180	22	45	EETHC2W181HJ	0.87	0.20	200
				25	35	EETHC2W181JC	0.87	0.20	200
	25	40		EETHC2W181JJ	0.87	0.20	200		
	30	25		EETHC2W181KC	0.87	0.20	200		
	180	30	30	EETHC2W181KJ	0.87	0.20	200		
			220	22	50	EETHC2W221HJ	1.00	0.20	200
				25	40	EETHC2W221JC	1.00	0.20	200
				25	45	EETHC2W221JJ	1.00	0.20	200
	30	30		EETHC2W221KJ	1.00	0.20	200		
	220	35	25	EETHC2W221LJ	1.00	0.20	200		
			270	25	45	EETHC2W271JC	1.19	0.20	200
				25	50	EETHC2W271JJ	1.19	0.20	200
				30	35	EETHC2W271KC	1.19	0.20	100
	30	40		EETHC2W271KJ	1.19	0.20	100		
	270	35	30	EETHC2W271LJ	1.19	0.20	200		
			330	25	50	EETHC2W331JC	1.38	0.20	200
				30	40	EETHC2W331KC	1.38	0.20	100
				30	45	EETHC2W331KJ	1.38	0.20	100
	35	30		EETHC2W331LC	1.38	0.20	200		
	330	35	35	EETHC2W331LJ	1.38	0.20	100		
			390	30	45	EETHC2W391KC	1.55	0.20	100
				30	50	EETHC2W391KJ	1.55	0.20	100
				35	35	EETHC2W391LC	1.55	0.20	100
	35	40		EETHC2W391LJ	1.55	0.20	100		
	390	30	50	EETHC2W471KC	1.74	0.20	100		
			470	35	EETHC2W471LC	1.74	0.20	100	
				35	45	EETHC2W471LJ	1.74	0.20	100
	*	560	35	EETHC2W561LJ	1.90	0.20	100		
	*								

Endurance : 105 °C 2000 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 (L:20 mm)

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 max. (mm)		Ripple Current (120 Hz) (+105 °C) (A r.m.s.)	tan δ (120 Hz) (+20 °C) max.	
200	220	22	20	EETHC2D221HJ	0.85	0.15	200
	270	25	20	EETHC2D271JJ	0.95	0.15	200
	330	30	20	EETHC2D331KJ	1.10	0.15	200
	390	30	20	EETHC2D391KJ	1.20	0.15	200
	470	35	20	EETHC2D471LJ	1.41	0.15	200
	560	35	20	EETHC2D561LJ	1.48	0.15	200
250	150	22	20	EETHC2E151HJ	0.69	0.15	200
	180	25	20	EETHC2E181JJ	0.77	0.15	200
	220	30	20	EETHC2E221KJ	0.95	0.15	200
	270	30	20	EETHC2E271KJ	1.00	0.15	200
	330	35	20	EETHC2E331LJ	1.16	0.15	200
	390	35	20	EETHC2E391LJ	1.30	0.15	200
400	56	22	20	EETHC2G560HJ	0.40	0.15	200
	68	25	20	EETHC2G680JJ	0.49	0.15	200
	82	30	20	EETHC2G820KJ	0.55	0.15	200
	100	30	20	EETHC2G101KJ	0.60	0.15	200
	120	35	20	EETHC2G121LJ	0.75	0.15	200
	150	35	20	EETHC2G151LJ	0.80	0.15	200
450	39	22	20	EETHC2W390HJ	0.36	0.20	200
	47	25	20	EETHC2W470JJ	0.41	0.20	200
	56	25	20	EETHC2W560JJ	0.43	0.20	200
	68	30	20	EETHC2W680KJ	0.50	0.20	200
	82	30	20	EETHC2W820KJ	0.53	0.20	200
	100	35	20	EETHC2W101LJ	0.61	0.20	200

Endurance : 105 °C 2000 h, Terminal Pitch : 10 mm