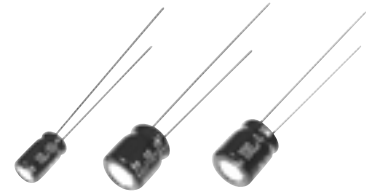


### Radial Lead Type

Series: **KA(Bi-polar)** Type: **A**



#### ■ Features

- Endurance : 85° C 1000 h
- 7 mm height
- RoHS directive compliant

#### ■ Specifications

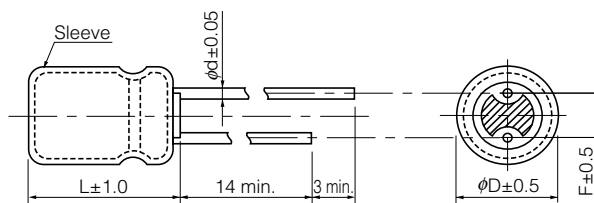
Category Temp. Range	-40 °C to +85 °C		
Rated W.V. Range	4 V.DC to 50 V.DC		
Nominal Cap. Range	2.2 μF to 100 μF		
Capacitance Tolerance	±20 % (120 Hz/+20 °C)		
DC Leakage Current	I ≤ 0.05 CV or 10 (μA) After 2 minutes (Whichever is greater)		
tan δ	Please see the attached standard products list		
Endurance	After 1000 hours application of DC working voltage (500 hours for each polarity) at +85 °C±2 °C, when the capacitors are restored to 20 °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 +85 °C±2 °C with no voltage applied and then being stabilized at +20 °C, capacitors shall meet the limits specified in Endurance (With voltage treatment)		

#### ■ Frequency correction factor for ripple current

	Frequency (Hz)			
	50, 60	120	1 k	10 k to
Correction factor	0.70	1.00	1.30	1.70

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

(Unit : mm)



Body Dia. φD	4	5	6.3
Lead Dia. φd	0.45	0.45	0.45
Lead space F	1.5	2.0	2.5

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.

02 May, 2014

### ■ Standard Products (Bi-polar)

Endurance : 85 °C 1000 h (500hours for each polarity)

W.V. (V)	Cap. (±20 %) (μF)	Case size		Specification		Lead Length			Part No.	Min. Packaging Q'ty		
		Dia. (mm)	Length (mm)	Ripple Current (120 Hz) (+85 °C) (mA r.m.s.)	tan δ (120 Hz) (+20 °C)	Lead Dia. (mm)	Lead Space			Straight Leads (pcs)	Taping (pcs)	
							Straight (mm)	Taping *B (mm)				Taping *i (mm)
4	100	6.3	7	61	0.35	0.45	2.5	5.0	2.5	ECEA0GKN101( )	200	2000
	22	5	7	29	0.24	0.45	2.0	5.0	2.5	ECEA0JKN220( )	200	2000
6.3	33	5	7	38	0.24	0.45	2.0	5.0	2.5	ECEA0JKN330( )	200	2000
	47	6.3	7	46	0.24	0.45	2.5	5.0	2.5	ECEA0JKN470( )	200	2000
10	10	4	7	25	0.20	0.45	1.5	5.0	2.5	ECEA1AKN100( )	200	2000
	22	5	7	35	0.20	0.45	2.0	5.0	2.5	ECEA1AKN220( )	200	2000
	33	6.3	7	43	0.20	0.45	2.5	5.0	2.5	ECEA1AKN330( )	200	2000
	47	6.3	7	65	0.20	0.45	2.5	5.0	2.5	ECEA1AKN470( )	200	2000
16	4.7	4	7	20	0.16	0.45	1.5	5.0	2.5	ECEA1CKN4R7( )	200	2000
	10	5	7	25	0.16	0.45	2.0	5.0	2.5	ECEA1CKN100( )	200	2000
	22	6.3	7	39	0.16	0.45	2.5	5.0	2.5	ECEA1CKN220( )	200	2000
	33	6.3	7	60	0.16	0.45	2.5	5.0	2.5	ECEA1CKN330( )	200	2000
25	3.3	4	7	16	0.16	0.45	1.5	5.0	2.5	ECEA1EKN3R3( )	200	2000
	4.7	5	7	21	0.16	0.45	2.0	5.0	2.5	ECEA1EKN4R7( )	200	2000
	10	6.3	7	28	0.16	0.45	2.5	5.0	2.5	ECEA1EKN100( )	200	2000
	22	6.3	7	55	0.16	0.45	2.5	5.0	2.5	ECEA1EKN220( )	200	2000
35	2.2	4	7	12	0.14	0.45	1.5	5.0	2.5	ECEA1VKN2R2( )	200	2000
	3.3	5	7	16	0.14	0.45	2.0	5.0	2.5	ECEA1VKN3R3( )	200	2000
	4.7	5	7	22	0.14	0.45	2.0	5.0	2.5	ECEA1VKN4R7( )	200	2000
	10	6.3	7	30	0.14	0.45	2.5	5.0	2.5	ECEA1VKN100( )	200	2000
50	0.1	4	7	1	0.12	0.45	1.5	5.0	2.5	ECEA1HKN0R1( )***	200	2000
	0.22	4	7	2	0.12	0.45	1.5	5.0	2.5	ECEA1HKNR22( )***	200	2000
	0.33	4	7	3	0.12	0.45	1.5	5.0	2.5	ECEA1HKNR33( )***	200	2000
	0.47	4	7	5	0.12	0.45	1.5	5.0	2.5	ECEA1HKNR47( )***	200	2000
	1	4	7	10	0.12	0.45	1.5	5.0	2.5	ECEA1HKN010( )***	200	2000
	2.2	5	7	16	0.12	0.45	2.0	5.0	2.5	ECEA1HKN2R2( )	200	2000
	3.3	5	7	16	0.12	0.45	2.0	5.0	2.5	ECEA1HKN3R3( )	200	2000
	4.7	6.3	7	23	0.12	0.45	2.5	5.0	2.5	ECEA1HKN4R7( )	200	2000

· When requesting taped product, please put the letter "B" or "i" between the "( )". Lead wire pitch \*B=5 mm, 7.5 mm, i=2.5 mm.

· Please refer to the page of "Taping Dimensions".

\*\*\* Please kindly accept last shipment : 31/Mar/2015