



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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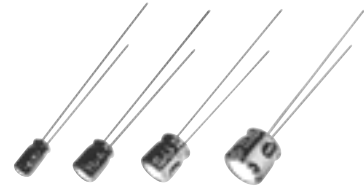
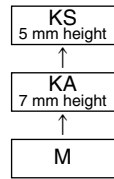
### Radial Lead Type

Series: **KS**    Type: **A**

#### ■ Features

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

Low Profile



#### ■ Specifications

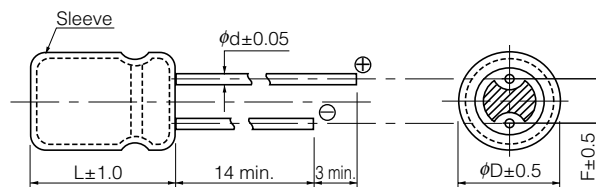
Category Temp. Range	-40 °C to +85 °C	
Rated W.V. Range	4 V.DC to 50 V.DC	
Nominal Cap. Range	2.2 μF to 330 μF	
Capacitance Tolerance	±20 % (120 Hz/+20 °C)	
DC Leakage Current	$I \leq 0.01 CV$ or 3 (μA) After 2 minutes (Whichever is greater)	
tan δ	Please see the attached standard products list	
Endurance	After applying rated working voltage for 1000 hours at +85 °C±2 °C, when the capacitors are restored to 20°C capacitors, shall meet the following limits.	
	Capacitance change	± 20% of initial measured value (4 V : ±30 %)
	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

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

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

(Unit : mm)



	4	5	6.3	8
Body Dia. φD	4	5	6.3	8
Lead Dia. φd	0.45	0.45	0.45	0.45
Lead space F	1.5	2.0	2.5	2.5

### Standard Products

Endurance : 85 °C 1000 h

W.V.	Cap. (±20 %)	Case size		Specification		Lead Length				Part No.	Min. Packaging Q'ty	
		Dia.	Length	Ripple Current (120 Hz) (+85 °C) (mA r.m.s.)	tan δ (120 Hz) (+20 °C)	Lead Dia.	Lead Space				Straight Leads	Taping
							Straight	Taping *B	Taping *i			
(V)	(μF)	(mm)	(mm)	(mA r.m.s.)		(mm)	(mm)	(mm)			(pcs)	(pcs)
4	33	4	5	26	0.35	0.45	1.5	5.0	2.5	ECEA0GKS330( )	200	2000
	47	4	5	34	0.35	0.45	1.5	5.0	2.5	ECEA0GKS470( )	200	2000
	100	5	5	61	0.35	0.45	2.0	5.0	2.5	ECEA0GKS101( )	200	2000
	220	6.3	5	82	0.35	0.45	2.5	5.0	2.5	ECEA0GKS221( )	200	2000
6.3	22	4	5	29	0.24	0.45	1.5	5.0	2.5	ECEA0JKS220( )	200	2000
	33	5	5	38	0.24	0.45	2.0	5.0	2.5	ECEA0JKS330( )	200	2000
	47	5	5	46	0.24	0.45	2.0	5.0	2.5	ECEA0JKS470( )	200	2000
	100	6.3	5	71	0.24	0.45	2.5	5.0	2.5	ECEA0JKS101( )	200	2000
	330	8	5	130	0.24	0.45	2.5		2.5	ECEA0JKS331( )	200	1000
		8	5	130	0.24	0.45		5.0		ECEA0JKS331Q		1000
10	22	5	5	35	0.20	0.45	2.0	5.0	2.5	ECEA1AKS220( )	200	2000
	33	5	5	43	0.20	0.45	2.0	5.0	2.5	ECEA1AKS330( )	200	2000
	47	6.3	5	65	0.20	0.45	2.5	5.0	2.5	ECEA1AKS470( )	200	2000
	100	6.3	5	80	0.20	0.45	2.5	5.0	2.5	ECEA1AKS101( )	200	2000
	220	8	5	120	0.20	0.45	2.5		2.5	ECEA1AKS221( )	200	1000
		8	5	120	0.20	0.45		5.0		ECEA1AKS221Q		1000
16	10	4	5	28	0.16	0.45	1.5	5.0	2.5	ECEA1CKS100( )	200	2000
	22	5	5	39	0.16	0.45	2.0	5.0	2.5	ECEA1CKS220( )	200	2000
	33	6.3	5	60	0.16	0.45	2.5	5.0	2.5	ECEA1CKS330( )	200	2000
	47	6.3	5	70	0.16	0.45	2.5	5.0	2.5	ECEA1CKS470( )	200	2000
	100	8	5	91	0.16	0.45	2.5		2.5	ECEA1CKS101( )	200	1000
		8	5	91	0.16	0.45		5.0		ECEA1CKS101Q		1000
25	4.7	4	5	22	0.14	0.45	1.5	5.0	2.5	ECEA1EKS4R7( )	200	2000
	10	5	5	28	0.14	0.45	2.0	5.0	2.5	ECEA1EKS100( )	200	2000
	22	6.3	5	55	0.14	0.45	2.5	5.0	2.5	ECEA1EKS220( )	200	2000
	33	6.3	5	65	0.14	0.45	2.5	5.0	2.5	ECEA1EKS330( )	200	2000
	100	8	5	85	0.14	0.45	2.5		2.5	ECEA1EKS101( )	200	1000
		8	5	85	0.14	0.45		5.0		ECEA1EKS101Q		1000
35	3.3	4	5	16	0.12	0.45	1.5	5.0	2.5	ECEA1VKS3R3( )	200	2000
	4.7	4	5	22	0.12	0.45	1.5	5.0	2.5	ECEA1VKS4R7( )	200	2000
	10	5	5	30	0.12	0.45	2.0	5.0	2.5	ECEA1VKS100( )	200	2000
	22	6.3	5	60	0.12	0.45	2.5	5.0	2.5	ECEA1VKS220( )	200	2000
	33	8	5	65	0.12	0.45	2.5		2.5	ECEA1VKS330( )	200	1000
			8	5	65	0.12	0.45		5.0		ECEA1VKS330Q	
50	47	8	5	85	0.12	0.45	2.5		2.5	ECEA1VKS470( )	200	1000
		8	5	85	0.12	0.45		5.0		ECEA1VKS470Q		1000
	0.1	4	5	1	0.10	0.45	1.5	5.0	2.5	ECEA1HKS0R1( )***	200	2000
	0.22	4	5	2	0.10	0.45	1.5	5.0	2.5	ECEA1HKS0R2( )***	200	2000
	0.33	4	5	3	0.10	0.45	1.5	5.0	2.5	ECEA1HKS0R3( )***	200	2000
	0.47	4	5	5	0.10	0.45	1.5	5.0	2.5	ECEA1HKS0R4( )***	200	2000
	1	4	5	10	0.10	0.45	1.5	5.0	2.5	ECEA1HKS010( )***	200	2000
	2.2	4	5	16	0.10	0.45	1.5	5.0	2.5	ECEA1HKS2R2( )	200	2000
	3.3	4	5	16	0.10	0.45	1.5	5.0	2.5	ECEA1HKS3R3( )	200	2000
	4.7	5	5	23	0.10	0.45	2.0	5.0	2.5	ECEA1HKS4R7( )	200	2000
	10	6.3	5	35	0.10	0.45	2.5	5.0	2.5	ECEA1HKS100( )	200	2000
	22	8	5	60	0.10	0.45	2.5		2.5	ECEA1HKS220( )	200	1000
		8	5	60	0.10	0.45		5.0		ECEA1HKS220Q		1000

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

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

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

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.