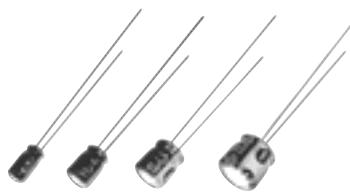
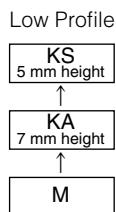


Radial Lead Type

Series: **KS** Type: **A**

■ Features

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



■ Specifications

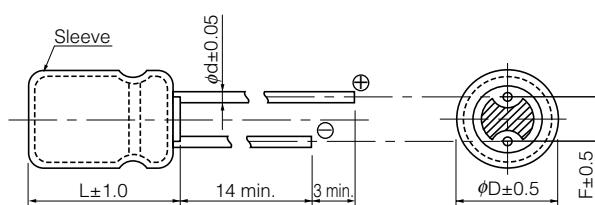
Category	Temp. Range	-40 °C to +85 °C	
Rated W.V. Range		4 V.DC to 50 V.DC	
Nominal Cap. Range		2.2 µF to 330 µF	
Capacitance Tolerance		±20 % (120 Hz/+20 °C)	
DC Leakage Current		$I \leq 0.01 CV$ or $3 (\mu A)$ After 2 minutes (Whichever is greater)	
$\tan \delta$		Please see the attached standard products 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 %)	
	$\tan \delta$	≤ 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	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. (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	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		1000
	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
50	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".