

### Radial Lead Type

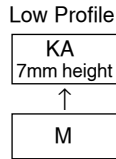
Series: KA Type : A

Country of Origin

Japan  
Malaysia  
China



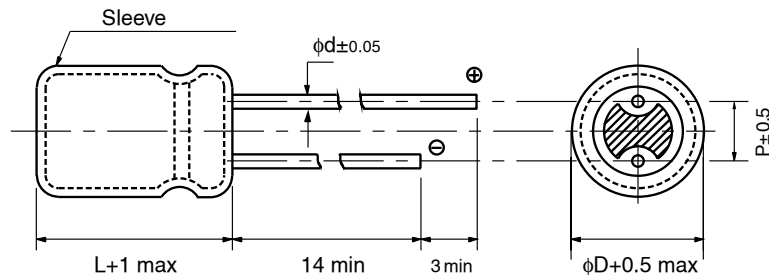
- Features Endurance: 85°C 1000 h  
7 mm height  
RoHS directive compliant



#### ■ Specifications

Category Temp. range	-40 to +85°C								
Rated W.V. Range	4 to 50 V .DC								
Nominal Cap. Range	0.1 to 470 μ F								
Capacitance Tolerance	±20 % (120Hz/+20°C)								
DC Leakage Current	I ≤ 0.01 CV or 3(μ A) after 2 minutes (Whichever is greater)								
tan δ	Please see the attached standard products list								
Characteristics at Low Temperature	W.V. (V)	4	6.3	10	16	25	35	50	(Impedance ratio at 120 Hz)
	Z(-25°C)/Z(+20°C)	7	4	3	2	2	2	2	
	Z(-40°C)/Z(+20°C)	15	8	6	4	4	3	3	
Endurance	After applying rated working voltage for 1000 hours at +85°C and then being stabilized at +20°C, capacitors shall meet the following limits.								
	Capacitance change	± 20% of initial measured value							
	tan δ	≤ 200 % of initial specified value							
Shelf Life	After storage for 1000 hours at +85±2 °C with 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)

Body Dia. φD	4	5	6.3	8
Lead Dia. φd	0.45	0.45	0.45	0.45
Lead Space P	1.5	2.0	2.5	3.5

### ■ Standard Products

W.V. (V)	Cap. (±20%) (μF)	Case size		Specification		Lead Length				Part No.	Min. Packaging Qty	
		Dia. (mm)	Length (mm)	Ripple current (120Hz) (+85°C) (mA)	tan δ (120Hz) (+20°C)	Lead Dia. (mm)	Lead Space				Straight Leads (pcs)	Taping (pcs)
							Straight (mm)	Taping *B (mm)	Taping *i (mm)			
4	47	4	7	34	0.35	0.45	1.5	5.0	2.5	ECEA0GKA470( )	200	2000
	100	5	7	61	0.35	0.45	2.0	5.0	2.5	ECEA0GKA101( )	200	2000
	220	6.3	7	82	0.35	0.45	2.5	5.0	2.5	ECEA0GKA221( )	200	2000
	330	8	7	110	0.35	0.45	3.5		2.5	ECEA0GKA331( )	200	1000
				110	0.35	0.45		5.0		ECEA0GKA331Q		1000
	470	8	7	140	0.35	0.45	3.5		2.5	ECEA0GKA471( )	200	1000
				140	0.35	0.45		5.0		ECEA0GKA471Q		1000
6.3	47	4	7	46	0.24	0.45	1.5	5.0	2.5	ECEA0JKA470( )	200	2000
	100	5	7	71	0.24	0.45	2.0	5.0	2.5	ECEA0JKA101( )	200	2000
	220	6.3	7	103	0.24	0.45	2.5	5.0	2.5	ECEA0JKA221( )	200	2000
	330	8	7	130	0.24	0.45	3.5		2.5	ECEA0JKA331( )	200	1000
				130	0.24	0.45		5.0		ECEA0JKA331Q		1000
10	33	4	7	43	0.20	0.45	1.5	5.0	2.5	ECEA1AKA330( )	200	2000
	100	6.3	7	80	0.20	0.45	2.5	5.0	2.5	ECEA1AKA101( )	200	2000
	220	8	7	120	0.20	0.45	3.5		2.5	ECEA1AKA221( )	200	1000
				120	0.20	0.45		5.0		ECEA1AKA221Q		1000
16	10	4	7	28	0.16	0.45	1.5	5.0	2.5	ECEA1CKA100( )	200	2000
	22	4	7	39	0.16	0.45	1.5	5.0	2.5	ECEA1CKA220( )	200	2000
	33	5	7	60	0.16	0.45	2.0	5.0	2.5	ECEA1CKA330( )	200	2000
	47	5	7	70	0.16	0.45	2.0	5.0	2.5	ECEA1CKA470( )	200	2000
	100	6.3	7	91	0.16	0.45	2.5	5.0	2.5	ECEA1CKA101( )	200	2000
25	10	4	7	28	0.14	0.45	1.5	5.0	2.5	ECEA1EKA100( )	200	2000
	22	5	7	55	0.14	0.45	2.0	5.0	2.5	ECEA1EKA220( )	200	2000
	33	6.3	7	65	0.14	0.45	2.5	5.0	2.5	ECEA1EKA330( )	200	2000
	47	6.3	7	70	0.14	0.45	2.5	5.0	2.5	ECEA1EKA470( )	200	2000
35	10	5	7	30	0.12	0.45	2.0	5.0	2.5	ECEA1VKA100( )	200	2000
	22	6.3	7	60	0.12	0.45	2.5	5.0	2.5	ECEA1VKA220( )	200	2000
	33	6.3	7	65	0.12	0.45	2.5	5.0	2.5	ECEA1VKA330( )	200	2000
	47	8	7	85	0.12	0.45	3.5		2.5	ECEA1VKA470( )	200	1000
				85	0.12	0.45		5.0		ECEA1VKA470Q		1000
50	0.1	4	7	1	0.10	0.45	1.5	5.0	2.5	ECEA1HKA0R1( )	200	2000
	0.22	4	7	2	0.10	0.45	1.5	5.0	2.5	ECEA1HKAR22( )	200	2000
	0.33	4	7	3	0.10	0.45	1.5	5.0	2.5	ECEA1HKAR33( )	200	2000
	0.47	4	7	5	0.10	0.45	1.5	5.0	2.5	ECEA1HKAR47( )	200	2000
	1	4	7	10	0.10	0.45	1.5	5.0	2.5	ECEA1HKA010( )	200	2000
	2.2	4	7	16	0.10	0.45	1.5	5.0	2.5	ECEA1HKA2R2( )	200	2000
	3.3	4	7	18	0.10	0.45	1.5	5.0	2.5	ECEA1HKA3R3( )	200	2000
	4.7	4	7	23	0.10	0.45	1.5	5.0	2.5	ECEA1HKA4R7( )	200	2000
	10	5	7	35	0.10	0.45	2.0	5.0	2.5	ECEA1HKA100( )	200	2000
	22	6.3	7	60	0.10	0.45	2.5	5.0	2.5	ECEA1HKA220( )	200	2000
	33	8	7	75	0.10	0.45	3.5		2.5	ECEA1HKA330( )	200	1000
				75	0.10	0.45		5.0		ECEA1HKA330Q		1000

When requesting taped product, please put the letter "B" or "i" between the "( )". Lead wire pitch B=5mm, i=2.5mm. The taping dimensions are explained on p.196 of our Catalog. Please use it as a reference guide.

Endurance: 85°C 1000 h