

EK Series

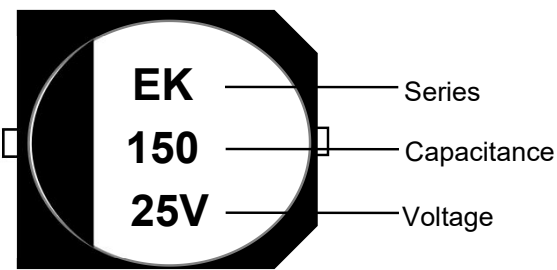
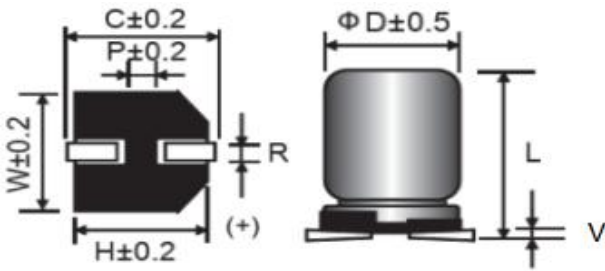
Feature

- ◆ AEC-Q200 compliant.
- ◆ Guaranteed duration: 2000 hours at 105°C.
- ◆ Suitable for SMT Process.
- ◆ RoHS compliant.

Items	Characteristics									
Temperature Range	-55°C ~ +105°C									
Rated Voltage Range	6.3V ~ 100V									
Capacitance Range	1 ~ 68000 μF									
Capacitance Tolerance	±20% (20°C, 120Hz)									
Leakage Current	I ≤ 0.01CV or 3μA, Take the larger of the two values (after applying the rated working voltage for 2 minutes) CR: nominal capacitance (μF) UR: rated voltage (V).									
Dissipation Factor (tg δ) (20°C, 120Hz)	UR (V)	6.3	10	16	25	35	50	63	100	
	tg δ	0.32	0.28	0.24	0.18	0.15	0.14	0.12	0.12	
Endurance	After storing the capacitor at 105°C without voltage application for 2000 hours, the capacitor shall meet the above endurance requirements after being recovered to 20°C.									
	Capacitance Change	within ±20% of the initial value								
	Dissipation Factor	≤ 200% of the initial ralted value								
	Leakage Current	≤ initial ralted value								
High temperature storage	After storing the capacitor at 105°C without voltage application for 1000 hours, the capacitor shall meet the above endurance requirements after being recovered to 20°C.									
Low Temperature	UR (V)	6.3	10	16	25	35	50	63	100	
	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2	
	Z(-55°C)/Z(20°C)	8	8	4	4	3	3	3	3	
Resistance to soldering heat	Place the capacitor on a hot plate at 250°C and hold for 30 seconds. Then remove the capacitor from the hot plate and allow it to recover at room temperature. The capacitor shall meet the requirements listed on the right.								Capacitance Change	within ±10% of the initial value
									Dissipation Factor (tg δ)	≤ initial ralted value
									Leakage Current	≤ initial ralted value

Coefficient of Frequency for Rated Ripple Current

Frequency (Hz)	50	120	300	1K	≥ 10K
coefficient	0.70	1.00	1.17	1.36	1.50

Mark	Appearance & Dimension
 <p> EK — Series 150 — Capacitance 25V — Voltage </p>	 <p>(Unit:mm)</p>

Dimensions	ΦD	L	W	H	C	R	P	Vmax
4x5.4	4	5.4±0.3	4.3	4.3	5.1	0.5~0.8	1.0	0.3
5x5.4	5	5.4±0.3	5.3	5.3	5.9	0.5~0.8	1.4	0.3
6.3x5.4	6.3	5.4±0.3	6.6	6.6	7.2	0.5~0.8	2.1	0.3
6.3x7.7	6.3	7.7±0.3	6.6	6.6	7.2	0.5~0.8	2.1	0.3
8x6.5	8	6.5±0.5	8.3	8.3	9.0	0.5~0.8	2.3	0.3
8x10	8	10.0±0.5	8.3	8.3	9.0	0.7~1.1	3.2	0.3
10x10	10	10.0±0.5	10.3	10.3	11.0	0.7~1.3	4.5	0.3
12.5x13.5	12.5	13.5±0.5	13.0	13.0	13.7	1.1~1.4	4.5	0.4
12.5x16	12.5	16±0.5	13.0	13.0	13.7	1.1~1.4	4.5	0.4
16x16.5	16	16.5±0.5	17.0	17.0	18.0	1.4~1.8	6.4	0.4
16x16.5	16	21.5±0.5	17.0	17.0	18.0	1.4~1.8	6.4	0.4
18x16.5	18	16.5±1.0	19.0	19.0	20.0	1.4~1.8	6.4	0.4
18x21.5	18	21.5±1.0	19.0	19.0	20.0	1.4~1.8	6.4	0.4

EK Characteristics Table

Rated Voltage (V.DC)	Capacitance (±20%) (μF)	Dimensions(mm)		Electrical Characteristics		Minimum Packaging Quantity (PCS)
		ΦD	L	Rated Ripple Current (120Hz/105℃) (mA r.m.s)	tan δ (120Hz/20℃)	
6.3	22	4	5.4	22	0.32	2000
	33	5	5.4	34	0.32	1000
	47	5	5.4	38	0.32	1000
	100	6.3	5.4	69	0.32	1000
	220	6.3	7.7	120	0.32	1000
	330	8	10	290	0.32	500
	470	8	10	320	0.32	500
	680	8	10	340	0.32	500
	1000	10	10	410	0.32	500
	1500	10	10	550	0.32	500
	2200	12.5	13.5	680	0.32	250
	2200	16	16.5	840	0.32	200
	3300	12.5	16	850	0.32	200
	3300	18	16.5	1000	0.32	150
	4700	16	21.5	1200	0.32	125
	4700	18	16.5	1200	0.32	150
	6800	16	21.5	1200	0.32	125
6800	18	21.5	1350	0.32	100	
10	22	5	5.4	30	0.28	1000
	33	5	5.4	34	0.28	1000
	47	6.3	5.4	48	0.28	1000
	100	6.3	5.4	69	0.28	1000
	150	6.3	7.7	100	0.28	1000
	220	6.3	7.7	120	0.28	1000
	330	8	10	290	0.28	500
	470	8	10	320	0.28	500
	1000	10	10	410	0.28	500
	2200	12.5	16	750	0.28	200
	2200	16	16.5	850	0.28	200
	3300	16	16.5	1000	0.28	200
	3300	18	16.5	1100	0.28	150
	4700	16	21.5	1300	0.28	125
4700	18	21.5	1350	0.28	100	
16	10	4	5.4	17	0.24	2000
	22	5	5.4	30	0.24	1000
	33	6.3	5.4	45	0.24	1000
	47	6.3	5.4	48	0.24	1000
	100	6.3	5.4	69	0.24	1000
	150	6.3	7.7	100	0.24	1000
	220	8	10	120	0.24	500
	330	8	10	290	0.24	500
	470	10	10	320	0.24	500
	680	10	10	470	0.24	500
	1000	16	16.5	550	0.24	200
	1000	18	16.5	650	0.24	150
	2200	16	21.5	950	0.24	125
	2200	18	21.5	1000	0.24	100
	3300	16	21.5	1200	0.24	125
	3300	18	21.5	1200	0.24	100

EK Characteristics Table

Rated Voltage (V.DC)	Capacitance (±20%) (µF)	Dimensions(mm)		Electrical Characteristics		Minimum Packaging Quantity (PCS)
		ΦD	L	Rated Ripple Current (120Hz/105°C) (mA r.m.s)	tan δ (120Hz/20°C)	
25	10	5	5.4	27	0.18	1000
	22	6.3	5.4	44	0.18	1000
	33	6.3	5.4	50	0.18	1000
	47	6.3	5.4	60	0.18	1000
	100	6.3	7.7	100	0.18	1000
	150	8	10	240	0.18	500
	220	8	10	320	0.18	500
	330	10	10	450	0.18	500
	470	10	10	490	0.18	500
	1000	16	16.5	820	0.18	200
	1000	18	16.5	880	0.18	150
	2200	16	21.5	1250	0.18	125
	2200	18	21.5	1300	0.18	100
35	4.7	4	5.4	16	0.15	2000
	10	5	5.4	27	0.15	1000
	22	6.3	5.4	44	0.15	1000
	47	6.3	7.7	80	0.15	1000
	100	6.3	7.7	100	0.15	1000
	150	8	10	260	0.15	500
	220	10	10	375	0.15	500
	330	10	10	450	0.15	500
	470	12.5	13.5	520	0.15	250
	470	16	16.5	650	0.15	200
	1000	16	16.5	750	0.15	200
	1000	18	16.5	1000	0.15	150
	2200	18	21.5	1450	0.15	100
50	1	4	5.4	8	0.14	2000
	2.2	4	5.4	12	0.14	2000
	3.3	4	5.4	15	0.14	2000
	4.7	5	5.4	20	0.14	1000
	10	6.3	5.4	32	0.14	1000
	33	6.3	7.7	65	0.14	1000
	47	6.3	7.7	80	0.14	1000
	100	8	10	230	0.14	500
	220	10	10	375	0.14	500
	330	12.5	13.5	500	0.14	250
	330	16	16.5	600	0.14	200
	470	16	16.5	700	0.14	200
	470	18	16.5	750	0.14	150
	1000	18	21.5	1200	0.14	100

EK Characteristics Table

Rated Voltage (V.DC)	Capacitance (±20%) (µF)	Dimensions(mm)		Electrical Characteristics		Minimum Packaging Quantity (PCS)
		ΦD	L	Rated Ripple Current (120Hz/105℃) (mA r.m.s)	tan δ (120Hz/20℃)	
63	1	4	5.4	8	0.12	2000
	2.2	4	5.4	12	0.12	2000
	3.3	5	5.4	17	0.12	1000
	4.7	6.3	5.4	22	0.12	1000
	10	6.3	5.4	32	0.12	1000
	22	6.3	7.7	58	0.12	1000
	33	8	10	140	0.12	500
	47	8	10	170	0.12	500
	100	10	10	310	0.12	500
	220	12.5	13.5	470	0.12	250
	220	16	16.5	560	0.12	200
	330	16	16.5	700	0.12	200
	330	18	16.5	750	0.12	150
	470	16	21.5	900	0.12	125
	470	18	16.5	900	0.12	150
100	22	8	10	100	0.12	500
	33	10	10	150	0.12	500
	47	12.5	13.5	250	0.12	250
	68	12.5	13.5	300	0.12	250
	100	12.5	13.5	380	0.12	250
	100	16	16.5	450	0.12	200
	220	16	21.5	750	0.12	125
	220	18	16.5	750	0.12	150
	330	18	21.5	980	0.12	100