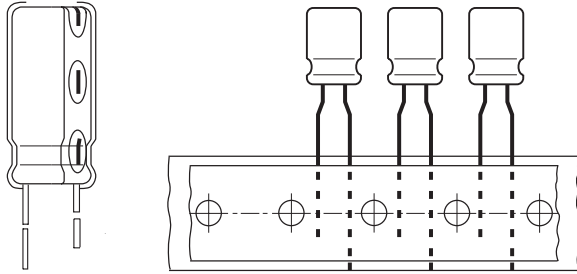


## Aluminum Capacitors Radial Style



Component outlines.

### FEATURES

- Polarized Aluminum electrolytic capacitor
- Small dimensions, high C•U product
- Extremely low impedance and  $R_{ESR}$  values
- Very high AC rating
- Extremely long lifetime
- High temperature range

### APPLICATIONS

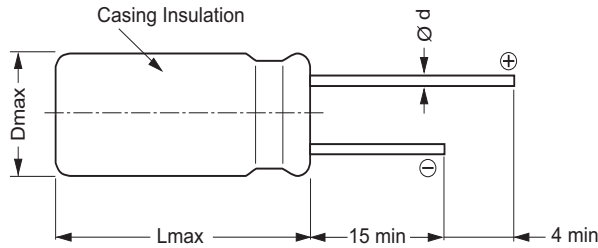
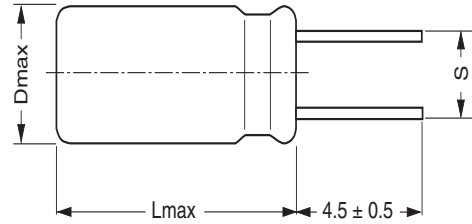
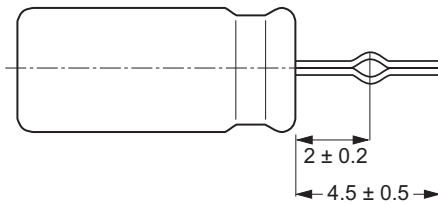
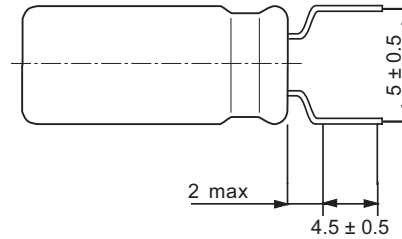
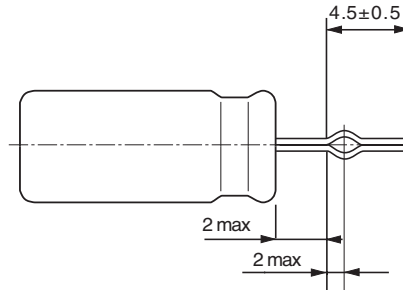
- Industrial electronics, telecommunication systems, audio / video systems
- Highly professional switching power supply units
- Smoothing, filtering
- Portable and mobile units

QUICK REFERENCE DATA							
DESCRIPTION	UNIT	VALUE					
Nominal case size ( $\varnothing D \times L$ )	mm	5 x 11.5 to 8 x 12	8 x 15 to 10 x 12.5	10 x 16 to 10 x 20	10 x 25 to 12.5 x 20 <sup>1)</sup>	12.5 x 25 to 12.5 x 30	12.5 x 35 to 16 x 40
Rated capacitance range $C_R$	$\mu F$	10 to 8200					
Capacitance tolerance	%	$\pm 20$					
Rated voltage range	V	10 to 63					
Category temperature range	$^{\circ}C$	- 55 to + 105					
Endurance test at upper category temperature	h	2000		3000		5000	
Useful life at 105 $^{\circ}C$ and $I_R$ applied	h	3000	4000	6000	7000	8000	10000
Useful life at 85 $^{\circ}C$ and $I_R$ applied	h	12000	16000	24000	28000	32000	40000
Useful life at 40 $^{\circ}C$ and $I_R$ applied	h	270000	360000	500000	500000	500000	500000
Failure rate	$10^{-9}/h$	$\leq 5$					
Based on sectional specification		IEC 384-4, CECC 30300, LL grade					
Climatic category							
IEC 68		55/105/56					
DIN 40040		FMF					

<sup>1)</sup> and dimensions 16 x 20



<b>SELECTION CHART FOR C<sub>R</sub>, U<sub>R</sub> AND RELEVANT NOMINAL CASE SIZES (∅D x L in mm)</b>						
C <sub>R</sub> (μF)	RATED VOLTAGE [V]					
	10	16	25	35	50	63
10	-	-	-	-	-	5 x 11.5
15	-	-	-	-	-	5 x 15
18	-	-	-	-	5 x 11.5	6.3 x 11.5
27	-	-	-	5 x 11.5	5 x 15	-
33	-	-	-	-	-	6.3 x 15
39	-	-	5 x 11.5	5 x 15	6.3 x 11.5	-
47	-	-	-	-	-	8 x 12
56	-	5 x 11.5	5 x 15	6.3 x 11.5	6.3 x 15	10 x 12.5
68	-	-	-	-	8 x 12	8 x 15 10 x 16
82	5 x 11.5	5 x 15	6.3 x 11.5	6.3 x 15	8 x 15 10 x 12.5	8 x 20
100	5 x 15	-	-	-	-	-
120	-	6.3 x 11.5	6.3 x 15	8 x 12 10 x 12.5	8 x 20 10 x 16	10 x 20
150	-	-	8 x 12	-	-	10 x 25
180	6.3 x 11.5	6.3 x 11.5	10 x 12.5	8 x 15	10 x 20	10 x 30
220	6.3 x 15	-	8 x 15	8 x 20 10 x 16	10 x 25	12.5 x 20
270	-	8 x 12 10 x 12.5	-	-	-	12.5 x 25
330	8 x 12	8 x 15	8 x 20 10 x 16	10 x 20	10 x 30 12.5 x 20	16 x 20
390	10 x 12.5	-	-	10 x 25	-	12.5 x 30
470	8 x 15	8 x 20 10 x 16	10 x 20	-	12.5 x 25 16 x 25	12.5 x 35
560	-	-	10 x 25	10 x 30 12.5 x 20	12.5 x 30	12.5 x 40
680	8 x 20 10 x 16	10 x 20	-	12.5 x 25	12.5 x 35 16 x 20	16 x 30
820	-	10 x 25 12.5 x 20	10 x 30	16 x 25	12.5 x 40	16 x 35
1000	10 x 20	-	12.5 x 25	12.5 x 30 16 x 20	16 x 30	16 x 40
1200	10 x 25	10 x 30 12.5 x 20	-	12.5 x 35 16 x 25	16 x 35	-
1500	10 x 30	12.5 x 25	12.5 x 30 16 x 20	12.5 x 40	12. x 40	-
1800	12.5 x 20	-	12.5 x 35 16 x 25	16 x 30	-	-
2200	12.5 x 25	12.5 x 30 16 x 20	12.5 x 40	16 x 35	-	-
2700	12.5 x 30	12.5 x 35 16 x 25	16 x 30	16 x 40	-	-
3300	12.5 x 35 16 x 20	12.5 x 40	16 x 35	-	-	-
3900	12.5 x 40 16 x 25	16 x 30	16 x 40	-	-	-
4700	-	16 x 35	-	-	-	-
5600	16 x 30	16 x 40	-	-	-	-
6800	16 x 35	-	-	-	-	-
8200	16 x 40	-	-	-	-	-

**DIMENSIONS** in millimeters **AND AVAILABLE FORMS**

 $5 \leq \text{ØD} \leq 16$  Long leads EKC 00...

 $5 \leq \text{ØD} \leq 16$  Shortened leads EKC 05...  
 (S = 2 / 2.5 / 3.5 / 5 / 7.5 mm)

 $10 \leq \text{ØD} \leq 16$  Leads shortened and formed EKC 06...  
 (S = 5 / 7.5 mm)

 $5 \leq \text{ØD} \leq 8$  Leads bent open, shortened EKC 09...  
 (S = 5 mm)

 $5 \leq \text{ØD} \leq 8$  Leads bent open, shortened and formed EKC 06...  
 (S = 5 mm)

 Leads are solder-coated steel  
 Safety vent for  $\text{ØD} \geq 8$  mm

<b>RADIAL STYLE: DIMENSIONS</b> in millimeters			
NOMINAL CASE SIZE $\text{ØD} \times L$	MAXIMUM SIZE $D_{\text{MAX}} \times L_{\text{MAX}}$	LEAD $\text{Ød} \pm 0.05$	LEAD SPACING $S \pm 0.5$
5 x 11.5	5.5 x 13	0.5	2.0
5 x 15	5.5 x 16.5	0.5	2.0
6.3 x 11.5	6.8 x 13	0.5	2.5
6.3 x 15	6.8 x 16.5	0.5	2.5
8 x 12	8.5 x 13.5	0.6	3.5
8 x 15	8.5 x 16.5	0.6	3.5
8 x 20	8.5 x 21.5	0.6	3.5
10 x 12.5	10.5 x 14	0.6	5.0
10 x 16	10.5 x 17.5	0.6	5.0
10 x 20	10.5 x 21.5	0.6	5.0
10 x 25	10.5 x 26.5	0.6	5.0
10 x 30	10.5 x 31.5	0.6	5.0
12.5 x 20	13 x 21.5	0.6	5.0
12.5 x 25	13 x 26.5	0.6	5.0
12.5 x 30	13 x 31.5	0.6	5.0
12.5 x 35	13 x 36.5	0.6	5.0



RADIAL STYLE: DIMENSIONS in millimeters			
NOMINAL CASE SIZE ØD x L	MAXIMUM SIZE D <sub>MAX.</sub> x L <sub>MAX.</sub>	LEAD Ød ± 0.05	LEAD SPACING S ± 0.5
12.5 x 40	13 x 41.5	0.6	5.0
16 x 20	16.5 x 21.5	0.8	7.5
16 x 25	16.5 x 26.5	0.8	7.5
16 x 30	16.5 x 31.5	0.8	7.5
16 x 35	16.5 x 36.5	0.8	7.5
16 x 40	16.5 x 41.5	0.8	7.5

ELECTRICAL DATA	
SYMBOL	DESCRIPTION
C <sub>R</sub>	rated capacitance at 120 Hz
U <sub>R</sub>	rated voltage
tan δ	max. dissipation factor at 120 Hz
Z	max. impedance at 100 Hz
I <sub>R</sub>	rated alternating current (rms) at 100 Hz and upper category temperature

**ORDERING EXAMPLE**

EKC 150 µF / 25 V, ± 20 %, size: 8 mm x 12 mm

Leads: Long - Ordering code: EKC00PT315E00

Leads: Short (5 ± 0.5) - Ordering code: EKC 05...

Leads: Bent open, shortened - Ordering code: EKC 09...

Leads: Bent open, shortened and formed - Ordering code: EKC 06...

**Note**

1. Unless otherwise specified, all electrical values at T<sub>a</sub> = 20 °C, P = 80 to 120 kPa, RH = 45 to 75%.

ELECTRICAL DATA AND ORDERING INFORMATION								
U <sub>R</sub> (V)	C <sub>R</sub> 120 Hz (µF)	NOMINAL CASE SIZE ØD x L (mm)	Tan δ 120 Hz	R <sub>ESR</sub> 100 Hz/20°C (Ω)	R <sub>ESR</sub> 100 Hz/-10°C (Ω)	I <sub>R</sub> 100 kHz/105 °C (mA)	WEIGHT (g)	CATALOG NUMBER
10	82	5.0 x 11.5	0.19	0.75	1.5	163	0.5	EKC00AB282C00
	100	5 x 15	0.19	0.50	1.0	225	0.6	EKC00AF310C00
	180	6.3 x 11.5	0.19	0.35	0.70	273	0.8	EKC00BB318C00
	220	6.3 x 15	0.19	0.25	0.50	390	0.9	EKC00BF322C00
	330	8 x 12	0.19	0.17	0.34	445	1.1	EKC00PT333C00
	390	10 x 12.5	0.19	0.12	0.24	625	1.5	EKC00DC339C00
	470	8 x 15	0.19	0.13	0.26	555	1.3	EKC00PF347C00
	680	8 x 20	0.19	0.095	0.19	740	1.8	EKC00PE368C00
	680	10 x 16	0.19	0.084	0.17	825	2.0	EKC00DD368C00
	1000	10 x 20	0.19	0.062	0.13	1040	2.5	EKC00DE410C00
	1200	10 x 25	0.19	0.052	0.11	1260	3.0	EKC00DG412C00
	1500	10 x 30	0.20	0.044	0.088	1440	3.5	EKC00DJ415C00
	1800	12.5 x 20	0.21	0.046	0.092	1340	3.8	EKC00FE418C00
	2200	12.5 x 25	0.21	0.034	0.068	1690	4.5	EKC00FG422C00
	2700	12.5 x 30	0.22	0.030	0.060	1950	5.5	EKC00FJ427C00
	3300	12.5 x 35	0.24	0.024	0.048	2220	6.0	EKC00FU433C00
	3300	16 x 20	0.24	0.038	0.076	1630	6.0	EKC00JE433C00
	3900	12.5 x 40	0.25	0.022	0.044	2390	7.0	EKC00FK439C00
	3900	16 x 25	0.25	0.028	0.056	2070	7.0	EKC00JG439C00
	5600	16 x 30	0.28	0.025	0.050	2350	9.0	EKC00JJ456C00
6800	16 x 35	0.31	0.022	0.044	2550	11.0	EKC00JU468C00	
8200	16 x 40	0.33	0.018	0.036	2900	13.0	EKC00JK482C00	



Aluminum Capacitors  
Radial Style

Vishay Roederstein

ELECTRICAL DATA AND ORDERING INFORMATION								
U <sub>R</sub> (V)	C <sub>R</sub> 120 Hz (μF)	NOMINAL CASE SIZE ∅D x L (mm)	Tan δ 120 Hz	R <sub>ESR</sub> 100 Hz/20°C (Ω)	R <sub>ESR</sub> 100 Hz/-10°C (Ω)	I <sub>R</sub> 100 kHz/105 °C (mA)	WEIGHT (g)	CATALOG NUMBER
16	56	5 x 11.5	0.16	0.75	1.5	163	0.5	EKC00AB256D00
	82	5 x 15	0.16	0.50	1.0	225	0.6	EKC00AF282D00
	120	6.3 x 11.5	0.16	0.35	0.70	273	0.8	EKC00BB312D00
	180	6.3 x 15	0.16	0.25	0.50	390	0.9	EKC00BF318D00
	270	8 x 12	0.16	0.17	0.34	445	1.1	EKC00PT327D00
	270	10 x 12.5	0.16	0.12	0.24	625	1.5	EKC00DC327D00
	330	8 x 15	0.16	0.13	0.26	555	1.3	EKC00PF333D00
	470	8 x 20	0.16	0.095	0.19	740	1.8	EKC00PE347D00
	470	10 x 16	0.16	0.084	0.17	825	2.0	EKC00DD347D00
	680	10 x 20	0.16	0.062	0.13	1040	2.5	EKC00DE368D00
	820	10 x 25	0.16	0.052	0.11	1260	3.0	EKC00DG382D00
	1200	10 x 30	0.16	0.044	0.088	1440	3.5	EKC00DJ412D00
	1200	12.5 x 20	0.16	0.046	0.092	1340	3.8	EKC00FE412D00
	1500	12.5 x 25	0.17	0.034	0.068	1690	4.5	EKC00FG415D00
	2200	12.5 x 30	0.18	0.030	0.060	1950	5.5	EKC00FJ422D00
	2200	16 x 20	0.18	0.038	0.076	1630	6.0	EKC00JE422D00
	2700	12.5 x 35	0.19	0.024	0.048	2200	6.0	EKC00FU427D00
	2700	16 x 25	0.19	0.028	0.056	2070	7.0	EKC00JG427D00
	3300	12.5 x 40	0.21	0.022	0.044	2390	7.0	EKC00FK433D00
	3900	16 x 30	0.22	0.025	0.050	2350	9.0	EKC00JJ439D00
4700	16 x 35	0.23	0.022	0.044	2550	11.0	EKC00JU447D00	
5600	16 x 40	0.25	0.018	0.036	2900	13.0	EKC00JK456D00	
25	39	5 x 11.5	0.14	0.75	1.5	163	0.5	EKC00AB239E00
	56	5 x 15	0.14	0.50	1.0	225	0.6	EKC00AF256E00
	82	6.3 x 11.5	0.14	0.35	0.70	273	0.8	EKC00BB282E00
	120	6.3 x 15	0.14	0.25	0.50	390	0.9	EKC00BF312E00
	150	8 x 12	0.14	0.17	0.34	445	1.1	EKC00PT315E00
	180	10 x 12.5	0.14	0.12	0.24	625	1.5	EKC00DC318E00
	220	8 x 15	0.14	0.13	0.26	555	1.3	EKC00PF322E00
	330	8 x 20	0.14	0.095	0.19	740	1.8	EKC00PE333E00
	330	10 x 16	0.14	0.084	0.17	825	2.0	EKC00DD333E00
	470	10 x 20	0.14	0.062	0.13	1040	2.5	EKC00DE347E00
	560	10 x 25	0.14	0.052	0.11	1260	3.0	EKC00DG356E00
	820	10 x 30	0.14	0.044	0.088	1440	3.5	EKC00DJ382E00
	820	12.5 x 20	0.14	0.046	0.092	1340	3.8	EKC00FE382E00
	1000	12.5 x 25	0.14	0.034	0.068	1690	4.5	EKC00FG410E00
	1500	12.5 x 30	0.15	0.030	0.060	1950	5.5	EKC00FJ415E00
	1500	16 x 20	0.15	0.038	0.076	1630	6.0	EKC00JE415E00
	1800	12.5 x 35	0.16	0.024	0.048	2200	6.0	EKC00FU418E00
	1800	16 x 25	0.16	0.028	0.056	2070	7.0	EKC00JG418E00
	2200	12.5 x 40	0.17	0.022	0.044	2390	7.0	EKC00FK422E00
	2700	16 x 30	0.18	0.025	0.050	2350	9.0	EKC00JJ427E00
3300	16 x 35	0.19	0.022	0.044	2550	11.0	EKC00JU433E00	
3900	16 x 40	0.20	0.018	0.036	2900	13.0	EKC00JK439E00	

**ELECTRICAL DATA AND ORDERING INFORMATION**

$U_R$ (V)	$C_R$ 120 Hz ( $\mu$ F)	NOMINAL CASE SIZE $\varnothing D \times L$ (mm)	$\tan \delta$ 120 Hz	$R_{ESR}$ 100 Hz/20°C ( $\Omega$ )	$R_{ESR}$ 100 Hz/-10°C ( $\Omega$ )	$I_R$ 100 kHz/105 °C (mA)	WEIGHT (g)	CATALOG NUMBER
35	27	5 x 11.5	0.12	0.75	1.5	163	0.5	EKC00AB227F00
	39	5 x 15	0.12	0.50	1.0	225	0.6	EKC00AF239F00
	56	6.3 x 11.5	0.12	0.35	0.70	273	0.8	EKC00BB256F00
	82	6.3 x 15	0.12	0.25	0.50	390	0.9	EKC00BF282F00
	120	8 x 12	0.12	0.17	0.34	445	1.1	EKC00PT312F00
	120	10 x 12.5	0.12	0.12	0.24	625	1.5	EKC00DC312F00
	180	8 x 15	0.12	0.13	0.26	555	1.3	EKC00PF318F00
	220	8 x 20	0.12	0.095	0.19	740	1.8	EKC00PE322F00
	220	10 x 16	0.12	0.084	0.17	825	2.0	EKC00DD322F00
	330	10 x 20	0.12	0.062	0.13	1040	2.5	EKC00DE333F00
	390	10 x 25	0.12	0.052	0.11	1260	3.0	EKC00DG339F00
	560	10 x 30	0.12	0.044	0.088	1440	3.5	EKC00DJ356F00
	560	12.5 x 20	0.12	0.046	0.092	1340	3.8	EKC00FE356F00
	680	12.5 x 25	0.12	0.034	0.068	1690	4.5	EKC00FG368F00
	1000	12.5 x 30	0.12	0.030	0.060	1950	5.5	EKC00FJ410F00
	1000	16 x 20	0.12	0.038	0.076	1630	6.0	EKC00JE410F00
	1200	12.5 x 35	0.12	0.024	0.048	2200	6.0	EKC00FU412F00
	1200	16 x 25	0.12	0.028	0.056	2070	7.0	EKC00JG412F00
	1500	12.5 x 40	0.13	0.022	0.044	2390	7.0	EKC00FK415F00
	1800	16 x 30	0.14	0.025	0.050	2350	9.0	EKC00JJ418F00
2200	16 x 35	0.15	0.022	0.044	2550	11.0	EKC00JU422F00	
2700	16 x 40	0.16	0.018	0.036	2900	13.0	EKC00JK427F00	
50	18	5 x 11.5	0.10	1.20	2.40	129	0.5	EKC00AB218H00
	27	5 x 15	0.10	0.80	1.60	180	0.6	EKC00AF227H00
	39	6.3 x 11.5	0.10	0.54	1.10	219	0.8	EKC00BB239H00
	56	6.3 x 15	0.10	0.34	0.68	310	0.9	EKC00BF256H00
	68	8 x 12	0.10	0.30	0.60	340	1.1	EKC00PT268H00
	82	8 x 15	0.10	0.20	0.40	470	1.3	EKC00PF282H00
	82	10 x 12.5	0.10	0.20	0.40	480	1.5	EKC00DC282H00
	120	8 x 20	0.10	0.14	0.28	610	1.8	EKC00PE312H00
	120	10 x 16	0.10	0.13	0.26	755	2.0	EKC00DD312H00
	180	10 x 20	0.10	0.088	0.18	945	2.5	EKC00DE318H00
	220	10 x 25	0.10	0.073	0.15	1150	3.0	EKC00DG322H00
	330	10 x 30	0.10	0.054	0.11	1260	3.5	EKC00DJ333H00
	330	12.5 x 20	0.10	0.059	0.12	1190	3.8	EKC00FE333H00
	470	12.5 x 25	0.10	0.044	0.088	1490	4.5	EKC00FG347H00
	560	12.5 x 30	0.10	0.039	0.078	1720	5.5	EKC00FJ356H00
	680	12.5 x 35	0.10	0.033	0.066	1890	6.0	EKC00FU368H00
	680	16 x 20	0.10	0.050	0.10	1420	6.0	EKC00JE368H00
	820	12.5 x 40	0.10	0.029	0.058	2030	7.0	EKC00FK382H00
	820	16 x 25	0.10	0.034	0.068	1880	7.0	EKC00JG382H00
	1000	16 x 30	0.10	0.030	0.060	2150	9.0	EKC00JJ410H00
1200	16 x 35	0.10	0.027	0.054	2320	11.0	EKC00JU412H00	
1500	16 x 40	0.11	0.024	0.048	2540	13.0	EKC00JK415H00	

**ELECTRICAL DATA AND ORDERING INFORMATION**

$U_R$ (V)	$C_R$ 120 Hz ( $\mu$ F)	NOMINAL CASE SIZE $\varnothing D \times L$ (mm)	$\tan \delta$ 120 Hz	$R_{ESR}$ 100 Hz/20°C ( $\Omega$ )	$R_{ESR}$ 100 Hz/-10°C ( $\Omega$ )	$I_R$ 100 kHz/105 °C (mA)	WEIGHT (g)	CATALOG NUMBER
63	10	5.0 x 11.5	0.10	1.9	4.8	103	0.5	EKC00AB210J00
	15	5 x 15	0.10	1.3	3.3	142	0.6	EKC00AF215J00
	18	6.3 x 11.5	0.10	1.0	2.5	161	0.8	EKC00BB218J00
	33	6.3 x 15	0.10	0.60	1.6	233	0.9	EKC00BF233J00
	47	8 x 12	0.10	0.47	1.2	274	1.1	EKC00PT247J00
	56	10 x 12.5	0.10	0.27	0.68	420	1.5	EKC00DC256J00
	68	8 x 15	0.10	0.34	0.85	360	1.3	EKC00PF268J00
	68	10 x 16	0.10	0.21	0.53	525	2.0	EKC00DD268J00
	82	8 x 20	0.10	0.21	0.53	500	1.8	EKC00PE282J00
	120	10 x 20	0.10	0.16	0.40	650	2.5	EKC00DE312J00
	150	10 x 25	0.10	0.13	0.33	785	3.0	EKC00DG315J00
	180	10 x 30	0.10	0.10	0.25	960	3.5	EKC00DJ318J00
	220	12.5 x 20	0.10	0.11	0.28	870	3.8	EKC00FE322J00
	270	12.5 x 25	0.10	0.074	0.19	1150	4.5	EKC00FG327J00
	330	16 x 20	0.10	0.085	0.22	1100	6.0	EKC00JE333J00
	390	12.5 x 30	0.10	0.068	0.17	1280	5.5	EKC00FJ339J00
	470	12.5 x 35	0.10	0.063	0.16	1390	6.0	EKC00FU347J00
	470	16 x 25	0.10	0.055	0.14	1480	7.0	EKC00JG347J00
	560	12.5 x 40	0.10	0.051	0.13	1530	7.0	EKC00FK356J00
	680	16 x 30	0.10	0.046	0.12	1720	9.0	EKC00JJ368J00
820	16 x 35	0.10	0.040	0.10	1910	11.0	EKC00JU382J00	
1000	16 x 40	0.10	0.036	0.09	2070	13.0	EKC00JK410J00	

**LEAKAGE CURRENT**Formula for calculation of the maximum leakage current for acceptance tests  $I_L$ :(Test conditions:  $C_R$ , 20 °C, 5 minutes)

$$I_{L2} [\mu A] \leq 0.01 \cdot C_R [\mu F] \cdot U_R [V] \quad \text{or } 3 \mu A \quad (\text{whichever is greater})$$



**LIFETIME TABLE**

<b>INTERRELATION BETWEEN ALTERNATING CURRENT, AMBIENT TEMPERATURE AND LIFETIME</b>													
$I/I_R$ (100KHz)	SURFACE TEMPERATURE RISE $\Delta T_0$ [°C]	LIFETIME MULTIPLIER L (DEPENDING ON $I/I_R$ AND $T_A$ )											
		AMBIENT TEMPERATURE $T_a$ [°C]											
		40	50	60	65	70	75	80	85	90	95	100	105
0.2	0.1	149	75	37	26	19	13	9.3	6.6	4.7	3.3	2.33	1.65
0.4	0.5	140	70	35	25	18	12	8.8	6.2	4.4	3.1	2.19	1.55
0.6	1.2	126	63	32	22	16	11	7.9	5.6	3.9	2.8	1.97	1.39
0.8	2.1	109	55	27	19	14	9.6	6.8	4.8	3.4	2.4	1.71	1.21
1.0	3.3	91	45	23	16	11	8	5.7	4.0	2.8	2.0	1.41	1.00
1.2	4.8	72	36	18	13	9.0	6.4	4.5	3.2	2.3	1.6	1.13	
1.4	6.5	55	27	14	9.7	6.9	4.9	3.4	2.4	1.7	1.2		
1.6	8.4	40	20	10	7.1	5.0	3.6	2.5	1.8	1.3			
1.8	11	28	14	7.1	5.0	3.5	2.5	1.8	1.2				
2.0	13	19	9.5	4.8	3.4	2.4	1.7	1.2					
2.2	16	12	6.1	3.1	2.2	1.5	1.1						
2.4	19	7.6	3.8	1.9	1.3								
2.6	22	4.5	2.3	1.1									
2.8	26	2.6	1.3										
3.0	30	1.4											

- $I_R$  100 kHz AC at upper category temperature  $T_{uc}$  taken from data sheet.
- $I$  User ripple current 100 kHz [A].
- $T_a$  Ambient temperature of capacitor [°C].
- $\Delta T$  Surface temperature rise [°C] of electrolytic capacitors caused by AC load.
- $L$  Lifetime multiplier.

<b>RIPPLE CURRENT MULTIPLIERS</b>				
<b>FREQUENCY MULTIPLIERS</b>				
Cap. [ $\mu F$ ] \ FREQUENZY (HZ)	120	1 k	10 k	100 k
100 ~ 180	0.40	0.75	0.90	1.00
220 ~ 560	0.50	0.85	0.94	1.00
680 ~ 1800	0.60	0.87	0.95	1.00
2200 ~ 3900	0.75	0.90	0.95	1.00
4700 ~ 8200	0.85	0.95	0.98	1.00