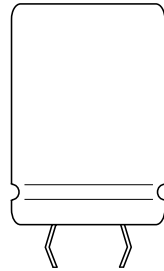
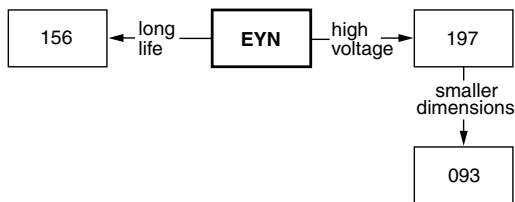


## Aluminum Capacitors Standard - 85 °C Snap-in



Component Outline


**FEATURES**

- Polarized aluminium electrolytic capacitors
- Small dimension
- High C • U


**RoHS**  
COMPLIANT

**APPLICATIONS**

- General use audio/video systems, industrial electronics
- Smoothing, filtering
- Standard and switch mode power supplies

**QUICK REFERENCE DATA**

DESCRIPTION	UNIT	LOW VOLTAGE *
Nominal case size ( $\varnothing D \times L$ )	mm	22 x 20 to 40 x 60
Rated capacitance range $C_R$	$\mu F$	1200 to 100 000
Capacitance tolerance	%	$\pm 20$
Rated voltage range	V	6.3 to 100
Category temperature range	$^{\circ}C$	- 40 to + 85
Endurance test at upper category temperature	h	2000
Useful life at 40 $^{\circ}C$ and $I_R$ applied	h	70 000
Failure rate (0.8 $U_R$ , 40 $^{\circ}C$ )	$10^{-9}/h$	$\leq 60$
Based on sectional specifications		IEC 60384-4, EN 130300
Climatic category IEC 60 068		40/85/56

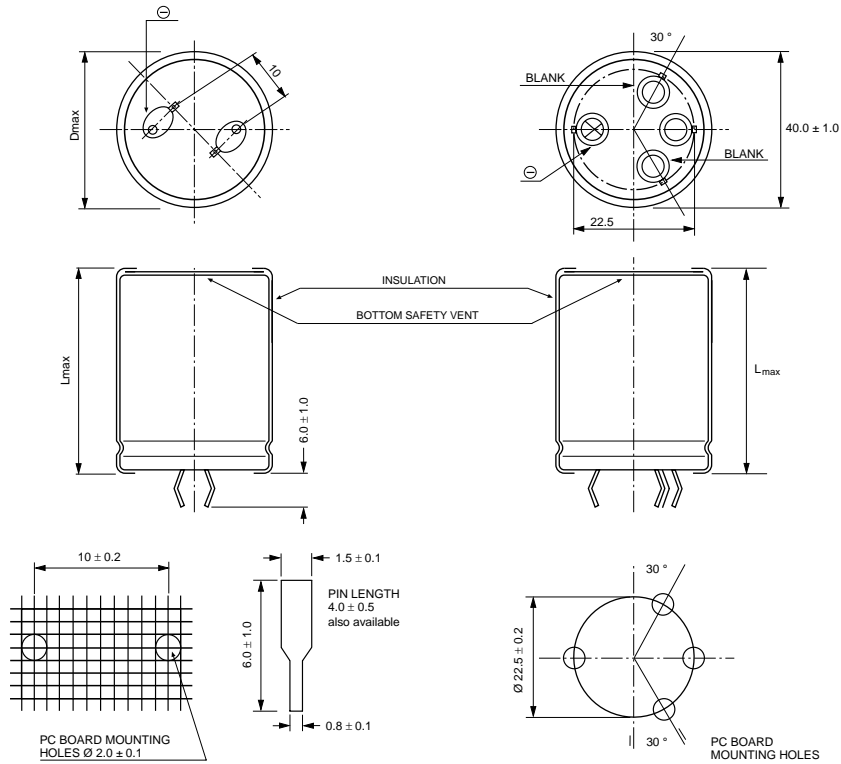
\* High voltage types are available on special requests

**SELECTION CHART FOR  $C_R$ ,  $U_R$  AND RELEVANT NOMINAL CASE SIZES ( $\varnothing D \times L$  in mm)**

$C_R$ ( $\mu F$ )	$U_R (V) \leq 100 V$							
	6.3	10	16	25	35	50	63	100
1200	-	-	-	-	-	-	-	22 x 30
1500	-	-	-	-	-	-	-	25 x 25 25 x 30
1800	-	-	-	-	-	-	22 x 25	22 x 40 25 x 35
2200	-	-	-	-	-	22 x 25	22 x 30 25 x 25	22 x 45 25 x 40
2700	-	-	-	-	-	-	22 x 35 25 x 30	25 x 45 30 x 25

<b>SELECTION CHART FOR C<sub>R</sub>, U<sub>R</sub> AND RELEVANT NOMINAL CASE SIZES (∅ D × L in mm)</b>								
C <sub>R</sub> (μF)	U <sub>R</sub> (V) ≤ 100 V							
	6.3	10	16	25	35	50	63	100
3300	-	-	-	-	-	22 x 30 25 x 25	22 x 35 25 x 30	25 x 50 30 x 40
3900	-	-	-	-	-	-	22 x 40 25 x 35	30 x 45 35 x 40
4700	-	-	-	-	22 x 30 25 x 25	22 x 40 25 x 35 35 x 25	22 x 50 25 x 40 35 x 30	30 x 50 35 x 40
5600	-	-	-	22 x 25	22 x 35 25 x 30	22 x 45 25 x 40 30 x 30	25 x 45 30 x 35 35 x 30	35 x 45 40 x 40
6800	-	-	-	22 x 30 25 x 25	22 x 40 25 x 30 30 x 25	22 x 50 25 x 40 30 x 25	25 x 50 30 x 40 35 x 30	40 x 50
8200	-	-	-	22 x 35 25 x 30	22 x 45 25 x 30	25 x 50 30 x 40	30 x 45 35 x 35	40 x 50
10 000	-	-	22 x 25	22 x 40 25 x 30	22 x 50 25 x 40	30 x 45 35 x 35	30 x 50 35 x 40	-
12 000	-	22 x 25	22 x 30 25 x 25	22 x 45 25 x 35	25 x 45 30 x 35	30 x 50 35 x 40	35 x 45 40 x 40	-
15 000	22 x 25	22 x 30 25 x 25	22 x 25 25 x 30	22 x 50 25 x 40	30 x 40 35 x 35	35 x 45	-	-
18 000	22 x 30 25 x 25	22 x 35 25 x 25	22 x 40 25 x 35	25 x 45 30 x 35	30 x 45 35 x 40	35 x 50 40 x 40	-	-
22 000	22 x 35 25 x 25	22 x 40 25 x 30	22 x 50 25 x 40	30 x 45 35 x 35	35 x 45 40 x 40	40 x 50 40 x 60	-	-
27 000	22 x 40 25 x 30	22 x 45 25 x 35	25 x 45 30 x 35	30 x 50 35 x 40	40 x 50	-	-	-
33 000	22 x 45 25 x 35 30 x 30	22 x 50 25 x 40 30 x 30	30 x 40 35 x 30	35 x 45 40 x 40	40 x 50	-	-	-
39 000	22 x 50 25 x 40 30 x 30	25 x 45 30 x 35 35 x 30	30 x 45 35 x 35	-	-	-	-	-
47 000	25 x 45 30 x 35	25 x 50 30 x 40	30 x 50 35 x 40	-	-	-	-	-
56 000	25 x 50 30 x 40	30 x 45 35 x 35	35 x 45 40 x 40	-	-	-	-	-
68 000	30 x 45	35 x 40	35 x 50	-	-	-	-	-
100 000	35 x 45	40 x 50	40 x 60	-	-	-	-	-

Special values/dimensions on request.

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


<b>DIMENSIONS</b> in millimeters <b>AND PACKING QUANTITIES</b>		
Normal case size $\varnothing D \times L$	Maximum size $D_{max} \times L_{max}$	Packaging quantity pcs
22 x 20 22 x 25 22 x 30 22 x 35 22 x 40 22 x 45 22 x 50	23 x 22 23 x 27 23 x 32 23 x 37 23 x 42 23 x 47 23 x 52	200
25 x 20 25 x 25 25 x 30 25 x 35 25 x 40 25 x 45 25 x 50	26.4 x 22 26.4 x 27 26.4 x 32 26.4 x 37 26.4 x 42 26.4 x 47 26.4 x 52	150
30 x 20 30 x 25 30 x 30 30 x 35 30 x 40 30 x 45 30 x 50	31 x 22 31 x 27 31 x 32 31 x 37 31 x 42 31 x 47 31 x 52	100
35 x 20 35 x 25 35 x 30 35 x 35 35 x 40 35 x 45 35 x 50	36 x 22 36 x 27 36 x 32 36 x 37 36 x 42 36 x 47 36 x 52	70
40 x 40 40 x 50 40 x 60	41 x 42 41 x 52 41 x 62	50





Aluminum Capacitors  
Standard - 85 °C Snap-in

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 MAX.	ESR 120 Hz max. (Ω)	Z 10 kHz MAX. (Ω)	I <sub>R</sub> 120 Hz 85 °C (A)	WEIGHT [G]	CATALOG NUMBER	
10	33 000	35 x 25	0.72	0.030	<0.030	4.9	34	EYN07CU533C02□	
	39 000	25 x 45	0.78	0.030	<0.030	5.4	31	EYN07AC539C02□	
	39 000	30 x 25	0.78	0.030	<0.030	5.3	25	EYN07BU539C02□	
	39 000	35 x 30	0.78	0.030	<0.030	5.4	41	EYN07CV539C02□	
	47 000	25 x 50	0.86	<0.030	<0.030	5.8	35	EYN07AD547C02□	
	47 000	30 x 40	0.86	<0.030	<0.030	5.8	40	EYN07BB547C02□	
	47 000	35 x 30	0.86	<0.030	<0.030	5.6	41	EYN07CV547C02□	
	56 000	30 x 45	0.95	<0.030	<0.030	6.2	45	EYN07BC556C02□	
	56 000	35 x 35	0.95	<0.030	<0.030	6.1	48	EYN07CA556C02□	
	68 000	35 x 40	1.07	<0.030	<0.030	6.6	55	EYN07CB568C02□	
	100 000	40 x 50	1.39	<0.030	<0.030	7.9	89	EYN07DD610C02□	
16	10 000	22 x 25	0.44	0.060	0.050	2.8	14	EYN07LU510C02□	
	12 000	22 x 30	0.46	0.055	0.040	3.0	16	EYN07LV512D02□	
	12 000	25 x 25	0.46	0.055	0.040	3.3	18	EYN07AU512D02□	
	15 000	22 x 35	0.49	0.045	0.035	3.6	19	EYN07LA515D02□	
	15 000	25 x 30	0.49	0.045	0.035	3.8	21	EYN07AV515D02□	
	15 000	30 x 25	0.49	0.045	0.035	3.9	25	EYN07BU515D02□	
	18 000	22 x 40	0.52	0.040	0.030	4.1	22	EYN07LB518D02□	
	18 000	25 x 35	0.52	0.040	0.030	4.2	25	EYN07AA518D02□	
	18 000	30 x 30	0.52	0.040	0.030	4.3	30	EYN07BV518D02□	
	22 000	22 x 50	0.56	0.035	0.030	4.7	27	EYN07LD522D02□	
	22 000	25 x 40	0.56	0.035	0.030	4.7	28	EYN07AB522D02□	
	22 000	30 x 30	0.56	0.035	0.030	4.6	30	EYN07BV522D02□	
	27 000	25 x 45	0.61	0.030	<0.030	5.2	31	EYN07AC527D02□	
	27 000	30 x 35	0.61	0.030	<0.030	5.1	35	EYN07BA527D02□	
	27 000	35 x 25	0.61	0.030	<0.030	4.9	34	EYN07CU527D02□	
	33 000	30 x 40	0.67	0.030	<0.030	5.6	40	EYN07BB533D02□	
	33 000	35 x 30	0.67	0.030	<0.030	5.4	41	EYN07CV533D02□	
	39 000	30 x 45	0.73	<0.030	<0.030	6.0	45	EYN07BC539D02□	
	39 000	35 x 35	0.73	<0.030	<0.030	5.9	48	EYN07CA539D02□	
	47 000	30 x 50	0.81	<0.030	<0.030	6.5	50	EYN07BD547D02□	
	47 000	35 x 40	0.81	<0.030	<0.030	6.4	55	EYN07CB547D02□	
	56 000	35 x 45	0.90	<0.030	<0.030	6.9	62	EYN07CC556D02□	
	56 000	40 x 40	0.90	<0.030	<0.030	7.0	72	EYN07DB556D02□	
	68 000	35 x 50	1.02	<0.030	<0.030	7.3	68	EYN07CD568D02□	
	68 000	40 x 50	1.02	<0.030	<0.030	7.8	89	EYN07DD568D02□	
		100 000	40 x 60	1.34	<0.030	<0.030	8.7	107	EYN07DF610D02□
	25	5600	22 x 25	0.37	0.090	0.070	2.3	14	EYN07LU468E02□
6800		22 x 30	0.38	0.075	0.060	2.6	16	EYN07LV468E02□	
6800		25 x 25	0.38	0.075	0.060	2.7	18	EYN07AU468E02□	
8200		22 x 35	0.39	0.065	0.050	2.9	19	EYN07LA482E02□	
8200		25 x 30	0.39	0.065	0.050	3.0	21	EYN07AV482E02□	
10 000		22 x 40	0.41	0.055	0.045	3.4	22	EYN07LB510E02□	
10 000		25 x 30	0.41	0.055	0.045	3.3	21	EYN07AV510E02□	
10 000		30 x 25	0.41	0.055	0.045	3.4	25	EYN07BU510E02□	
12 000		22 x 45	0.42	0.050	0.035	3.7	24	EYN07LC512E02□	
12 000		25 x 35	0.42	0.050	0.035	3.7	25	EYN07AA512E02□	
12 000		30 x 30	0.42	0.050	0.035	3.8	30	EYN07BV512E02□	
15 000		22 x 50	0.44	0.040	0.030	4.2	27	EYN07LD515E02□	
15 000		25 x 40	0.44	0.040	0.030	4.2	28	EYN07AB515E02□	
15 000		30 x 35	0.44	0.040	0.030	4.3	35	EYN07BA515E02□	
18 000		25 x 45	0.47	0.035	0.030	4.6	31	EYN07AC518E02□	
18 000		30 x 35	0.47	0.035	0.030	4.6	35	EYN07BA518E02□	
18 000		35 x 30	0.47	0.035	0.030	4.7	41	EYN07CV518E02□	
22 000		30 x 45	0.50	0.030	<0.030	5.3	45	EYN07BC522E02□	
22 000		35 x 35	0.50	0.030	<0.030	5.2	48	EYN07CA522E02□	
27 000		30 x 50	0.54	0.030	<0.030	5.8	50	EYN07BD527E02□	
27 000		35 x 40	0.54	0.030	<0.030	5.7	55	EYN07CB527E02□	
33 000		35 x 45	0.58	<0.030	<0.030	6.2	62	EYN07CC533E02□	
33 000		40 x 40	0.58	<0.030	<0.030	6.4	72	EYN07DB533E02□	

**ELECTRICAL DATA AND ORDERING INFORMATION**

$U_R$ (V)	$C_R$ 120 Hz ( $\mu$ F)	NOMINAL CASE SIZE D x L (mm)	$\tan \delta$ 120 Hz MAX.	ESR 120 Hz max. ( $\Omega$ )	Z 10 kHz MAX. ( $\Omega$ )	$I_R$ 120 Hz 85 °C (A)	WEIGHT [G]	CATALOG NUMBER
35	4700	22 x 30	0.29	0.085	0.060	2.6	16	EYN07LV447F02□
	4700	25 x 25	0.29	0.085	0.060	2.5	18	EYN07AU447F02□
	5600	22 x 35	0.30	0.075	0.055	2.8	19	EYN07LA456F02□
	5600	25 x 30	0.30	0.075	0.055	2.9	21	EYN07AV456F02□
	6800	22 x 40	0.30	0.060	0.045	3.2	22	EYN07LB468F02□
	6800	25 x 30	0.30	0.060	0.045	3.1	21	EYN07AV468F02□
	6800	30 x 25	0.30	0.060	0.045	3.2	25	EYN07BU468F02□
	8200	22 x 45	0.31	0.055	0.040	3.5	24	EYN07LC482F02□
	8200	25 x 35	0.31	0.055	0.040	3.5	25	EYN07AA482F02□
	8200	30 x 30	0.31	0.055	0.040	3.6	30	EYN07BV482F02□
	10 000	22 x 50	0.32	0.045	0.035	4.0	27	EYN07LD510F02□
	10 000	25 x 40	0.32	0.045	0.035	4.0	28	EYN07AB510F02□
	10 000	30 x 30	0.32	0.045	0.035	3.9	30	EYN07BV510F02□
	12 000	25 x 45	0.34	0.040	0.030	4.4	31	EYN07AC512F02□
	12 000	30 x 35	0.34	0.040	0.030	4.3	35	EYN07BA512F02□
	12 000	35 x 30	0.34	0.040	0.030	4.5	41	EYN07CV512F02□
	15 000	30 x 40	0.36	0.035	<0.030	4.9	40	EYN07BB515F02□
	15 000	35 x 35	0.36	0.035	<0.030	5.0	48	EYN07CA515F02□
	18 000	30 x 45	0.38	0.030	<0.030	5.3	45	EYN07BC518F02□
	18 000	35 x 40	0.38	0.030	<0.030	5.5	55	EYN07CB518F02□
22 000	35 x 45	0.40	<0.030	<0.030	6.0	62	EYN07CC522F02□	
22 000	40 x 40	0.40	<0.030	<0.030	6.1	72	EYN07DB522F02□	
27 000	40 x 50	0.43	<0.030	<0.030	6.9	89	EYN07DD527F02□	
33 000	40 x 50	0.47	<0.030	<0.030	7.2	89	EYN07DD533F02□	
50	3300	22 x 30	0.23	0.095	0.075	2.5	16	EYN07LV433H02□
	3300	25 x 25	0.23	0.095	0.075	2.6	18	EYN07AU433H02□
	4700	22 x 40	0.24	0.070	0.055	3.3	22	EYN07LB447H02□
	4700	25 x 35	0.24	0.070	0.055	3.4	25	EYN07AA447H02□
	4700	30 x 25	0.24	0.070	0.055	3.3	25	EYN07BU447H02□
	4700	35 x 25	0.24	0.070	0.055	3.6	34	EYN07CU447H02□
	5600	22 x 45	0.24	0.060	0.045	3.6	24	EYN07LC456H02□
	5600	25 x 40	0.24	0.060	0.045	3.8	28	EYN07AB456H02□
	5600	30 x 30	0.24	0.060	0.045	3.7	30	EYN07BV456H02□
	5600	35 x 25	0.24	0.060	0.045	3.8	34	EYN07CU456H02□
	6800	22 x 50	0.25	0.050	0.040	4.1	27	EYN07LD468H02□
	6800	25 x 40	0.25	0.050	0.040	4.0	28	EYN07AB468H02□
	6800	30 x 35	0.25	0.050	0.040	4.2	35	EYN07DF527H02□
	6800	35 x 30	0.25	0.050	0.040	4.3	41	EYN07CV468H02□
	8200	25 x 50	0.26	0.045	0.035	4.6	35	EYN07AD482H02□
	8200	30 x 40	0.26	0.045	0.035	4.6	40	EYN07BB482H02□
	8200	35 x 30	0.26	0.045	0.035	4.5	41	EYN07CV482H02□
	10 000	30 x 45	0.26	0.035	0.030	5.2	45	EYN07BC510H02□
	10 000	35 x 35	0.26	0.035	0.030	5.1	48	EYN07CA510H02□
	12 000	30 x 50	0.27	0.035	<0.030	5.6	50	EYN07BD512H02□
	12 000	35 x 40	0.27	0.035	<0.030	5.6	55	EYN07CB512H02□
	15 000	35 x 45	0.28	0.030	<0.030	6.1	62	EYN07CC515H02□
	18 000	35 x 50	0.30	<0.030	<0.030	6.6	68	EYN07CD518H02□
	18 000	40 x 40	0.30	<0.030	<0.030	6.5	72	EYN07DB518H02□
	22 000	40 x 50	0.31	<0.030	<0.030	7.3	89	EYN07DD522H02□
	27 000	40 x 60	0.34	<0.030	<0.030	8.0	107	EYN07DF527H02□



Aluminum Capacitors  
Standard - 85 °C Snap-in

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 MAX.	ESR 120 Hz max. (Ω)	Z 10 kHz MAX. (Ω)	I <sub>R</sub> 120 Hz 85 °C (A)	WEIGHT [G]	CATALOG NUMBER
63	1800	22 x 25	0.20	0.150	0.105	1.9	14	EYN07LU418J02□
	2200	22 x 30	0.20	0.125	0.090	2.1	16	EYN07LV422J02□
	2200	25 x 25	0.20	0.125	0.090	2.2	18	EYN07AU422J02□
	2700	22 x 35	0.21	0.105	0.075	2.5	19	EYN07LA427J02□
	2700	25 x 30	0.21	0.105	0.075	2.6	21	EYN07AV427J02□
	3300	22 x 35	0.21	0.085	0.060	2.7	19	EYN07LA433J02□
	3300	25 x 30	0.21	0.085	0.060	2.8	21	EYN07AV433J02□
	3300	30 x 25	0.21	0.085	0.060	2.8	25	EYN07BU433J02□
	3900	22 x 40	0.21	0.075	0.055	3.1	22	EYN07LB439J02□
	3900	25 x 35	0.21	0.075	0.055	3.2	25	EYN07AA439J02□
	3900	30 x 30	0.21	0.075	0.055	3.3	30	EYN07BV439J02□
	4700	22 x 50	0.22	0.065	0.045	3.6	27	EYN07LD447J02□
	4700	25 x 40	0.22	0.065	0.045	3.6	28	EYN07AB447J02□
	4700	30 x 35	0.22	0.065	0.045	3.5	35	EYN07BA447J02□
	4700	35 x 30	0.22	0.065	0.045	3.6	41	EYN07CV447J02□
	5600	25 x 45	0.22	0.055	0.040	4.0	31	EYN07AC456J02□
	5600	30 x 35	0.22	0.055	0.040	3.9	35	EYN07BA456J02□
	5600	35 x 30	0.22	0.055	0.040	4.0	41	EYN07CV456J02□
	6800	25 x 50	0.23	0.045	0.035	4.4	35	EYN07AD468J02□
	6800	30 x 40	0.23	0.045	0.035	4.4	40	EYN07BB468J02□
6800	35 x 30	0.23	0.045	0.035	4.3	41	EYN07CV468J02□	
8200	30 x 45	0.24	0.040	0.030	4.8	45	EYN07BC482J02□	
8200	35 x 35	0.24	0.040	0.030	4.7	48	EYN07CA482J02□	
10 000	30 x 50	0.25	0.035	<0.030	5.4	50	EYN07BD510J02□	
10 000	35 x 40	0.25	0.035	<0.030	5.3	55	EYN07CB510J02□	
12 000	35 x 45	0.26	0.030	<0.030	5.8	62	EYN07CC512J02□	
12 000	40 x 40	0.26	0.030	<0.030	5.9	72	EYN07DB512J02□	
100	1200	22 x 30	0.15	0.165	0.115	2.0	16	EYN07LV412L02□
	1200	25 x 25	0.15	0.165	0.165	2.1	18	EYN07AU412L02□
	1500	22 x 35	0.15	0.135	0.090	2.4	19	EYN07LA415L02□
	1500	25 x 30	0.15	0.135	0.090	2.5	21	EYN07AV415L02□
	1500	30 x 25	0.15	0.135	0.090	2.6	25	EYN07BU415L02□
	1800	22 x 40	0.15	0.115	0.080	2.8	22	EYN07LB418L02□
	1800	25 x 35	0.15	0.115	0.080	2.9	25	EYN07AA418L02□
	1800	30 x 30	0.15	0.115	0.080	3.0	30	EYN07BV418L02□
	2200	22 x 45	0.15	0.095	0.065	3.0	24	EYN07LC422L02□
	2200	25 x 40	0.15	0.095	0.065	3.2	28	EYN07AB422L02□
	2200	30 x 30	0.15	0.095	0.065	3.1	30	EYN07BV422L02□
	2700	25 x 45	0.16	0.080	0.055	3.7	31	EYN07AC427L02□
	2700	30 x 35	0.16	0.080	0.055	3.6	35	EYN07BA427L02□
	2700	35 x 30	0.16	0.080	0.055	3.7	41	EYN07CV427L02□
	3300	25 x 50	0.16	0.065	0.045	4.0	35	EYN07AD433L02□
	3300	25 x 40	0.16	0.065	0.045	4.0	40	EYN07BB433L02□
	3300	35 x 35	0.16	0.065	0.045	4.1	48	EYN07CA433L02□
	3900	30 x 45	0.16	0.060	0.040	4.6	45	EYN07BC439L02□
	3900	35 x 35	0.16	0.060	0.040	4.5	48	EYN07CA439L02□
	4700	30 x 50	0.17	0.050	0.035	5.0	50	EYN07BD447L02□
	4700	35 x 40	0.17	0.050	0.035	4.9	55	EYN07CB447L02□
	5600	35 x 45	0.17	0.045	0.030	5.4	62	EYN07CC456L02□
	5600	40 x 40	0.17	0.045	0.030	5.5	72	EYN07DB456L02□
	6800	40 x 50	0.18	0.040	<0.030	6.3	89	EYN07DD468L02□
	8200	40 x 50	0.19	0.035	<0.030	6.5	89	EYN07DD482L02□



**LOW TEMPERATURE BEHAVIOUR**

Table for the calculation of the maximum 10 KHz impedance at low temperatures:

$$Z(10\text{ kHz})[\Omega] = \frac{\text{Tabular value}}{C_R[\mu\text{F}]}$$

T <sub>a</sub> (°C)	RATED VOLTAGE U <sub>R</sub> (V)														
	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	500
25	9000	7200	5400	4050	3150	2700	2250	1710	1960	1820	1680	1870	1870	1870	1870
40	30 000	24 000	18 000	13 500	10 500	12 000	10 000	7600	7000	6500	7200	6600	-	-	-

The lower limit of the series resistance and impedance is given by the ohmic part of the contact points and the foil resistance values. Therefore it will not always be possible to achieve calculated values below 0.03 Ω.

**LEAKAGE CURRENT**

Formula for the calculation of the maximum leakage current I<sub>L</sub> for acceptance tests. Testing conditions: U<sub>R</sub>, 20 °C, 5 minutes.

$$I_L(300\text{s})/\mu\text{A} \leq 3 \times \sqrt{(C_R/\mu\text{F}) \times (U_R/V)}$$

**LIFETIME TABLE** U<sub>R</sub> ≤ 100 V

<b>INTERRELATION BETWEEN ALTERNATING CURRENT, AMBIENT TEMPERATURE AND LIFETIME</b>																
I <sub>R</sub> (FREQUENCY-DEPENDANT)							LIFETIME MULTIPLIER L (DEPENDING ON I <sub>R</sub> AND T <sub>A</sub> )									
FREQUENCY (HZ)							AMBIENT TEMPERATURE T <sub>A</sub> (°C)									
50	100	120	250	500	1000	>2500	40	45	50	55	60	65	70	75	80	85
0.00	0.00	0.00	0.00	0.00	0.00	0.00	66	42	27	17	11	7.6	5.1	3.5	2.4	1.7
0.17	0.19	0.20	0.22	0.23	0.23	0.24	62	40	26	17	11	7.4	5.0	3.4	2.3	1.6
0.34	0.39	0.40	0.43	0.45	0.46	0.47	53	34	22	15	9.9	6.7	4.5	3.1	2.2	1.5
0.51	0.58	0.60	0.65	0.68	0.70	0.71	43	28	19	12	8.4	5.8	4.0	2.8	1.9	1.4
0.68	0.78	0.80	0.86	0.90	0.93	0.94	32	22	15	10	6.9	4.8	3.4	2.4	1.7	1.2
0.85	0.97	<b>1.00</b>	1.08	1.13	1.16	1.18	23	16	11	7.8	5.5	3.8	2.7	1.9	1.4	<b>1.00</b>
1.02	1.17	1.20	1.30	1.35	1.39	1.42	16	12	8.3	5.9	4.2	3.0	2.2	1.6	1.1	
1.20	1.36	1.40	1.51	1.58	1.62	1.65	11	3.3	6.0	4.3	3.1	2.3	1.7	1.2		
1.37	1.56	1.60	1.73	1.81	1.85	1.89	7.7	6.0	4.2	3.1	2.3	1.7	1.3			
1.54	1.75	1.80	1.94	2.03	2.09	2.12	5.1	4.2	2.9	2.2	1.7	1.3				
1.71	1.95	2.00	2.16	2.26	2.32	2.36	3.4	2.9	2.0	1.6	1.2					
1.88	2.14	2.20	2.38	2.48	2.55	2.59	2.2	2.0	1.4	1.1						
2.05	2.34	2.40	2.59	2.71	2.78	2.83	1.5	1.4								
2.22	2.53	2.60	2.81	2.94	3.01	3.07	1.0									

- I<sub>R</sub> Rated ripple current (120 Hz, rms) [A] at upper category temperature T<sub>UC</sub> taken from data sheet.
- I User ripple current [A].
- T<sub>a</sub> Ambient temperature of capacitor [°C].
- L Useful life multiplier.

Regard L as a function of ambient temperature (x-axis) and of current (y-axis); use the current-axis according to the frequency.





## Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.