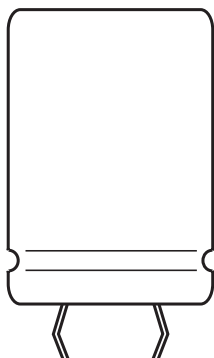


Aluminum Capacitors Power Printed Wiring Style



Component outlines

FEATURES

- Polarized aluminum electrolytic capacitors
- Very small dimensions
- High C x U product
- Charge/discharge proof
- Low impedance, high ripple current capability
- Long useful life: 5000 h to 10 000 h/105 °C



RoHS
COMPLIANT

APPLICATIONS

- General purpose, industrial electronics
- Computers, telecommunication, audio/video systems
- Smoothing and filtering
- Standard and switched power supply units
- Energy storage

QUICK REFERENCE DATA

DESCRIPTION	UNIT	≤ 100 V		> 100 V	
Nominal case size (Ø D x L)	mm	22 x 25 to 35 x 50		22 x 25 to 35 x 60	
Rated capacitance range C _R	µF	33 to 47 000		56 to 1800	
Capacitance tolerance	%	± 20			
Rated voltage range	V	10 to 50	63 to 100	200 to 250	400 to 450
Category temperature range	°C	- 40 to + 105			- 25 to + 105
Endurance test at 105 °C	h	2000	5000	2000	
Useful life at 105 °C	h	5000	10 000	5000	
Useful life at 40 °C, 1.9 x I _R applied	h	125 000	250 000	125 000	
Shelf life (0 V, 105 °C)	h	500			1000
Failure rate (0.8 U _R ; 40 °C)	10 ⁻⁹ /h	≤ 50	≤ 25	≤ 100	
Based on sectional specifications		IEC 60384-4/EN130300			
Climatic category IEC 60068		40/105/56			25/105/56

SELECTION CHART FOR C_R, U_R AND RELEVANT NOMINAL CASE SIZES ≤ 100 V (Ø D x L in mm)

C _R (µF)	U _R (V)						
	10	16	25	40	50	63	100
330	-	-	-	-	-	-	22 x 25
470	-	-	-	-	-	-	22 x 30
680	-	-	-	-	-	22 x 25	22 x 40 25 x 30
1000	-	-	-	-	22 x 25	22 x 30	25 x 40 30 x 30
1500	-	-	-	22 x 25	22 x 30	22 x 40 25 x 30	25 x 50 30 x 40
2200	-	-	22 x 25	22 x 30	22 x 40 25 x 30	25 x 40 30 x 30	25 x 50 35 x 40
3300	-	22 x 25	22 x 30	22 x 40 25 x 30	25 x 40 30 x 30	22 x 50 30 x 40	35 x 50
4700	22 x 25	22 x 30	22 x 40 25 x 30	25 x 40 30 x 30	25 x 50 30 x 40	30 x 50 35 x 40	-
6800	22 x 30	22 x 40 25 x 30	25 x 40 30 x 30	25 x 50 30 x 40	30 x 50 35 x 40	35 x 50	-
10 000	22 x 40 25 x 30	25 x 40 30 x 30	22 x 50 30 x 40	30 x 50 35 x 40	35 x 50	-	-
15 000	25 x 40 30 x 30	25 x 50 30 x 40	30 x 50 35 x 40	35 x 50	-	-	-
22 000	25 x 50 30 x 40	30 x 50 35 x 40	35 x 50	-	-	-	-
33 000	30 x 50 35 x 40	35 x 50	-	-	-	-	-
47 000	35 x 50	-	-	-	-	-	-

Note

- Special values/dimensions on request

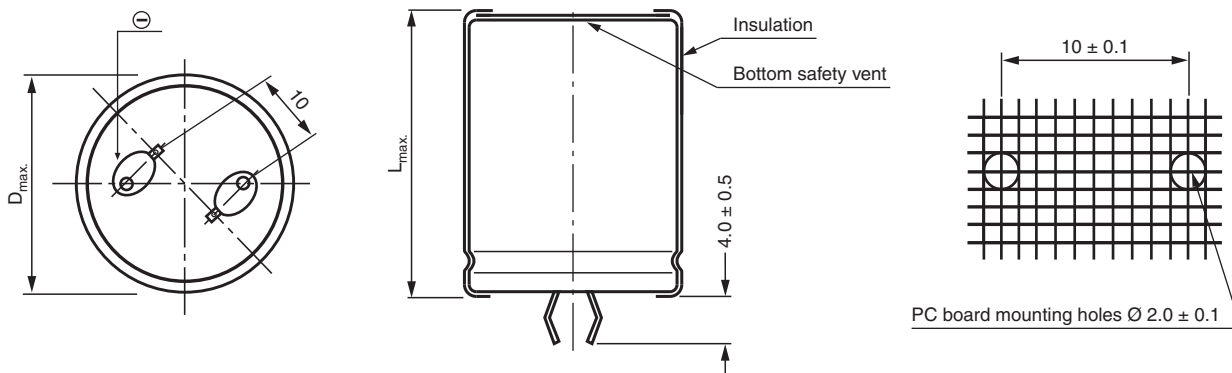


SELECTION CHART FOR C_R, U_R AND RELEVANT NOMINAL CASE SIZES > 100 V (∅ D x L in mm)				
C _R (μF)	U _R (V)			
	200	250	400	450
56	-	-	-	22 x 25
68	-	-	22 x 25	22 x 30 25 x 25
82	-	-	22 x 30 25 x 25	22 x 35
100	-	-	22 x 35 25 x 30	22 x 40 25 x 30 30 x 25
120	-	-	22 x 35 25 x 30 30 x 25	25 x 35
150	-	-	22 x 40 25 x 35 30 x 30	25 x 40 30 x 30 35 x 25
180	-	-	25 x 40 30 x 30 35 x 25	25 x 45 30 x 35
220	-	22 x 30 25 x 25	25 x 45 30 x 35 35 x 30	30 x 40 35 x 30
270	-	22 x 35 25 x 30 30 x 25	25 x 50 30 x 40 35 x 30	30 x 45 35 x 35
330	22 x 30	22 x 40 25 x 30 30 x 25	30 x 45 35 x 35	30 x 50 35 x 40
390	22 x 35 25 x 30 30 x 30	25 x 35 30 x 30 30 x 30	30 x 50 35 x 40	35 x 45
470	22 x 40 30 x 25	25 x 40 30 x 30 35 x 25	35 x 45	35 x 50
560	25 x 35 30 x 30	25 x 45 30 x 35 35 x 30	35 x 50	35 x 60
680	25 x 45 30 x 30 35 x 25	30 x 40 35 x 35	35 x 60	-
820	25 x 50 30 x 35 35 x 30	30 x 45 35 x 35 35 x 40	-	-
1000	30 x 45 35 x 35	35 x 40 35 x 45	-	-
1200	30 x 50 35 x 35	35 x 45 35 x 50	-	-
1500	35 x 45	-	-	-
1800	35 x 50	-	-	-

Note

- Special values/dimensions on request

DIMENSIONS in millimeters AND AVAILABLE FORMS





DIMENSIONS in millimeters, AND PACKAGING QUANTITIES		
NOMINAL CASE SIZE Ø D x L	MAXIMUM SIZE Ø D _{max.} x L _{max.}	PACKAGING QUANTITY (pieces)
22 x 25	23 x 27	100
22 x 30	23 x 32	
22 x 35	23 x 37	
22 x 40	23 x 42	
25 x 30	26 x 32	
25 x 35	26 x 37	
25 x 40	26 x 42	
25 x 50	26 x 52	
30 x 30	31 x 32	
30 x 35	31 x 37	
30 x 40	31 x 42	
30 x 45	31 x 47	
30 x 50	31 x 52	50
35 x 35	36 x 37	
35 x 40	36 x 42	
35 x 45	36 x 47	
35 x 50	36 x 52	
35 x 60	36 x 62	

ELECTRICAL DATA	
SYMBOL	DESCRIPTION
C _R	rated capacitance at 120 Hz
U _R	rated voltage
tan δ	max. dissipation factor at 120 Hz
R _{ESR}	max. equivalent series resistance at 120 Hz
Z	max. impedance at 10 kHz
I _R	rated alternating current (RMS), 120 Hz and upper category temperature
T	ambient temperature
RH	relative humidity
P	ambient pressure

ORDERING EXAMPLE

MALIEYC07AB447G02□ = MALIEYC 4700 µF/40 V
25 mm x 40 mm, fully insulated

Length of the snap-in pins: 4 mm ± 0.5 mm

The 13th place of ordering code refers to the kind of insulation:

MALIEYC07...02 2 = fully insulated

On special request only:

MALIEYC07...01 1 = sleeve insulation

The 14th place (□) is an intercompany code.

Note

- Unless otherwise specified, all electrical values apply at
T_{amb} = 20 °C, P = 80 kPa to 120 kPa, RH = 45 % to 75 %

ELECTRICAL DATA AND ORDERING INFORMATION								
U _R (V)	C _R 120 Hz (µF)	NOMINAL CASE SIZE Ø D x L (mm)	I _R 120 Hz 105 °C (A)	tan δ 120 Hz max.	R _{ESR} 120 Hz max. (Ω)	Z 10 kHz max. (Ω)	WEIGHT (g)	ORDERING CODE
10	4700	22 x 25	1.97	0.28	0.080	0.060	13	MALIEYC07LU447C02□
	6800	22 x 30	2.46	0.30	0.060	0.045	16	MALIEYC07LV468C02□
	10 000	22 x 40	3.32	0.31	0.045	0.035	22	MALIEYC07LB510C02□
	10 000	25 x 30	2.84	0.39	0.055	0.045	21	MALIEYC07AV510C02□
	15 000	25 x 40	3.82	0.41	0.040	0.035	28	MALIEYC07AB515C02□
	15 000	30 x 30	3.57	0.45	0.040	0.035	30	MALIEYC07BV515C02□
	22 000	25 x 50	4.73	0.49	0.030	< 0.030	35	MALIEYC07AD522C02□
	22 000	30 x 40	4.67	0.49	0.030	0.030	41	MALIEYC07BB522C02□
	33 000	30 x 50	5.76	0.57	< 0.030	< 0.030	51	MALIEYC07BD533C02□
	33 000	35 x 40	5.20	0.71	0.030	< 0.030	56	MALIEYC07CB533C02□
	47 000	35 x 50	6.29	0.81	< 0.030	< 0.030	70	MALIEYC07CD547C02□



Aluminum Capacitors
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Vishay Roederstein

ELECTRICAL DATA AND ORDERING INFORMATION								
U _R (V)	C _R 120 Hz (μF)	NOMINAL CASE SIZE Ø D x L (mm)	I _R 120 Hz 105 °C (A)	tan δ 120 Hz max.	R _{ESR} 120 Hz max. (Ω)	Z 10 kHz max. (Ω)	WEIGHT (g)	ORDERING CODE
16	3300	22 x 25	1.92	0.20	0.085	0.060	13	MALIEYC07LU433D02□
	4700	22 x 30	2.38	0.22	0.065	0.045	16	MALIEYC07LV447D02□
	6800	22 x 40	3.21	0.22	0.045	0.035	22	MALIEYC07LB468D02□
	6800	25 x 30	2.78	0.27	0.055	0.045	21	MALIEYC07AV468D02□
	10 000	25 x 40	3.70	0.29	0.04	0.035	28	MALIEYC07AB510D02□
	10 000	30 x 30	3.47	0.32	0.045	0.035	30	MALIEYC07BV510D02□
	15 000	25 x 50	4.60	0.34	0.035	< 0.030	35	MALIEYC07AD515D02□
	15 000	30 x 40	4.60	0.34	0.035	0.030	41	MALIEYC07BB515D02□
	22 000	30 x 50	5.73	0.39	< 0.030	< 0.030	51	MALIEYC07BD522D02□
	22 000	35 x 40	5.12	0.49	0.03	< 0.030	56	MALIEYC07CB522D02□
	33 000	35 x 50	6.29	0.59	< 0.030	< 0.030	70	MALIEYC07CD533D02□
25	2200	22 x 25	1.78	0.16	0.100	0.060	13	MALIEYC07LU422E02□
	3300	22 x 30	2.25	0.17	0.070	0.045	16	MALIEYC07LV433E02□
	4700	22 x 40	3.03	0.18	0.055	0.035	22	MALIEYC07LB447E02□
	4700	25 x 30	2.63	0.21	0.060	0.045	21	MALIEYC07AV447E02□
	6800	25 x 40	3.52	0.21	0.045	0.035	28	MALIEYC07AB468E02□
	6800	30 x 30	3.29	0.24	0.05	0.035	30	MALIEYC07BV468E02□
	10 000	25 x 50	4.41	0.25	0.035	< 0.030	35	MALIEYC07AD510E02□
	10 000	30 x 40	4.41	0.25	0.035	0.030	41	MALIEYC07BB510E02□
	15 000	30 x 50	5.48	0.29	0.030	< 0.030	51	MALIEYC07BD515E02□
	15 000	35 x 40	4.96	0.35	0.035	< 0.030	56	MALIEYC07CB515E02□
	22 000	35 x 50	6.13	0.43	0.030	< 0.030	70	MALIEYC07CD522E02□
40	1500	22 x 25	1.67	0.12	0.110	0.070	13	MALIEYC07LU415G02□
	2200	22 x 30	2.06	0.14	0.085	0.055	16	MALIEYC07LV422G02□
	3300	22 x 40	2.81	0.14	0.060	0.040	22	MALIEYC07LB433G02□
	3300	25 x 30	2.45	0.17	0.070	0.050	21	MALIEYC07AV433G02□
	4700	25 x 40	3.29	0.17	0.050	0.035	28	MALIEYC07AB447G02□
	4700	30 x 30	2.99	0.20	0.060	0.045	30	MALIEYC07BV447G02□
	6800	25 x 50	4.14	0.19	0.040	0.030	35	MALIEYC07AD468G02□
	6800	30 x 40	3.98	0.20	0.040	0.030	41	MALIEYC07BB468G02□
	10 000	30 x 50	5.03	0.26	0.035	< 0.030	51	MALIEYC07BD510G02□
	10 000	35 x 40	4.22	0.33	0.045	0.030	56	MALIEYC07CB510G02□
	15 000	35 x 50	5.26	0.39	0.035	< 0.030	70	MALIEYC07CD515G02□
50	1000	22 x 25	1.52	0.10	0.135	0.070	13	MALIEYC07LU410H02□
	1500	22 x 30	1.90	0.11	0.100	0.055	16	MALIEYC07LV415H02□
	2200	22 x 40	2.58	0.11	0.070	0.040	22	MALIEYC07LB422H02□
	2200	25 x 30	2.29	0.13	0.080	0.050	21	MALIEYC07AV422H02□
	3300	25 x 40	3.10	0.13	0.055	0.035	28	MALIEYC07AB433H02□
	3300	30 x 30	2.84	0.16	0.065	0.045	30	MALIEYC07BV433H02□
	4700	25 x 50	3.89	0.14	0.040	0.030	35	MALIEYC07AD447H02□
	4700	30 x 40	3.81	0.16	0.050	0.035	41	MALIEYC07BB447H02□
	6800	30 x 50	4.79	0.19	0.040	< 0.030	51	MALIEYC07BD468H02□
	6800	35 x 40	4.05	0.24	0.050	0.035	56	MALIEYC07CB468H02□
	10 000	35 x 50	5.09	0.27	0.040	< 0.030	70	MALIEYC07CD510H02□



ELECTRICAL DATA AND ORDERING INFORMATION								
U _R (V)	C _R 120 Hz (μF)	NOMINAL CASE SIZE Ø D x L (mm)	I _R 120 Hz 105 °C (A)	tan δ 120 Hz max.	R _{ESR} 120 Hz max. (Ω)	Z 10 kHz max. (Ω)	WEIGHT (g)	ORDERING CODE
63	680	22 x 25	1.18	0.11	0.215	0.150	13	MALIEYC07LU368J02□
	1000	22 x 30	1.47	0.12	0.160	0.115	16	MALIEYC07LV410J02□
	1500	22 x 40	2.02	0.12	0.110	0.085	22	MALIEYC07LB415J02□
	1500	25 x 30	1.78	0.15	0.135	0.085	21	MALIEYC07AV415J02□
	2200	25 x 40	2.42	0.15	0.095	0.070	28	MALIEYC07AB422J02□
	2200	30 x 30	2.29	0.16	0.100	0.070	30	MALIEYC07BV422J02□
	3300	25 x 50	3.10	0.17	0.070	0.050	35	MALIEYC07AD433J02□
	3300	30 x 40	3.10	0.17	0.070	0.050	41	MALIEYC07BB433J02□
	4700	30 x 50	3.92	0.18	0.055	0.045	51	MALIEYC07BD447J02□
	4700	35 x 40	3.69	0.20	0.060	0.045	56	MALIEYC07CB447J02□
	6800	35 x 50	4.63	0.22	0.045	0.035	70	MALIEYC07CD468J02□
100	330	22 x 25	0.93	0.09	0.365	0.250	13	MALIEYC07LU333L02□
	470	22 x 30	1.15	0.09	0.255	0.190	16	MALIEYC07LV347L02□
	680	22 x 40	1.59	0.09	0.180	0.140	22	MALIEYC07LB368L02□
	680	25 x 30	1.36	0.11	0.215	0.140	21	MALIEYC07AV368L02□
	1000	25 x 40	1.87	0.11	0.150	0.115	28	MALIEYC07AB410L02□
	1000	30 x 30	1.81	0.12	0.160	0.115	30	MALIEYC07BV410L02□
	1500	25 x 50	2.40	0.12	0.110	0.085	35	MALIEYC07AD415L02□
	1500	30 x 40	2.47	0.12	0.110	0.085	41	MALIEYC07BB415L02□
	2200	30 x 50	3.16	0.13	0.080	0.065	51	MALIEYC07BD422L02□
	2200	35 x 40	3.08	0.14	0.085	0.065	56	MALIEYC07CB422L02□
	3300	35 x 50	3.88	0.15	0.065	0.050	70	MALIEYC07CD433L02□
200	330	22 x 30	1.08	0.17	0.68	0.50	16	MALIEYC07LV333S02□
	390	22 x 35	1.23	0.17	0.58	0.47	19	MALIEYC07LA339S02□
	390	25 x 30	1.23	0.17	0.58	0.47	21	MALIEYC07AV339S02□
	470	22 x 40	1.37	0.17	0.48	0.40	22	MALIEYC07LB347S02□
	470	30 x 25	1.27	0.17	0.48	0.40	25	MALIEYC07BU347S02□
	560	25 x 35	1.50	0.17	0.40	0.38	25	MALIEYC07AA356S02□
	560	30 x 30	1.52	0.17	0.40	0.39	30	MALIEYC07BV356S02□
	680	25 x 45	1.82	0.17	0.33	0.34	32	MALIEYC07AC368S02□
	680	30 x 30	1.59	0.17	0.33	0.34	30	MALIEYC07BV368S02□
	680	35 x 25	1.44	0.17	0.33	0.34	35	MALIEYC07CU368S02□
	820	25 x 50	2.04	0.17	0.27	0.24	35	MALIEYC07AD382S02□
	820	30 x 35	1.83	0.17	0.27	0.24	36	MALIEYC07BA382S02□
	820	35 x 30	1.77	0.17	0.27	0.24	42	MALIEYC07CV382S02□
	1000	30 x 45	2.23	0.17	0.23	0.23	46	MALIEYC07BC410S02□
	1000	35 x 35	2.04	0.17	0.23	0.23	49	MALIEYC07CA410S02□
	1200	30 x 50	2.47	0.18	0.20	0.19	51	MALIEYC07BD412S02□
	1200	35 x 35	2.07	0.18	0.20	0.19	49	MALIEYC07CA412S02□
	1500	35 x 45	2.56	0.18	0.16	0.16	63	MALIEYC07CC415S02□
1800	35 x 50	2.80	0.19	0.14	0.13	70	MALIEYC07CD418S02□	



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ELECTRICAL DATA AND ORDERING INFORMATION								
U _R (V)	C _R 120 Hz (μF)	NOMINAL CASE SIZE Ø D x L (mm)	I _R 120 Hz 105 °C (A)	tan δ 120 Hz max.	R _{ESR} 120 Hz max. (Ω)	Z 10 kHz max. (Ω)	WEIGHT (g)	ORDERING CODE
250	220	22 x 30	1.00	0.17	1.02	0.70	16	MALIEYC07LV322N02□
	220	25 x 25	1.00	0.17	1.02	0.70	19	MALIEYC07AU322N02□
	270	22 x 35	1.07	0.17	0.84	0.56	19	MALIEYC07LA327N02□
	270	25 x 30	1.08	0.17	0.84	0.56	21	MALIEYC07AV327N02□
	270	30 x 25	1.08	0.17	0.84	0.56	25	MALIEYC07BU327N02□
	330	22 x 40	1.20	0.17	0.68	0.43	22	MALIEYC07LB333N02□
	330	25 x 30	1.21	0.17	0.68	0.43	21	MALIEYC07AV333N02□
	330	30 x 25	1.19	0.17	0.68	0.43	25	MALIEYC07BU333N02□
	390	25 x 35	1.39	0.17	0.58	0.41	25	MALIEYC07AA339N02□
	390	30 x 30	1.41	0.17	0.58	0.41	30	MALIEYC07BV339N02□
	470	25 x 40	1.58	0.17	0.48	0.40	28	MALIEYC07AB347N02□
	470	30 x 30	1.57	0.17	0.48	0.40	30	MALIEYC07BV347N02□
	470	35 x 25	1.37	0.17	0.48	0.40	35	MALIEYC07CU347N02□
	560	25 x 45	1.78	0.17	0.40	0.31	32	MALIEYC07AC356N02□
	560	30 x 35	1.71	0.17	0.40	0.31	36	MALIEYC07BA356N02□
	560	35 x 30	1.67	0.17	0.40	0.31	42	MALIEYC07CV356N02□
	680	30 x 40	1.93	0.17	0.33	0.26	41	MALIEYC07BB368N02□
	680	35 x 35	1.92	0.17	0.33	0.26	49	MALIEYC07CA368N02□
	820	30 x 45	2.16	0.17	0.27	0.21	46	MALIEYC07BC382N02□
	820	35 x 35	1.97	0.17	0.27	0.21	49	MALIEYC07CA382N02□
820	35 x 40	2.16	0.17	0.27	0.21	56	MALIEYC07CB382N02□	
1000	35 x 40	2.22	0.17	0.23	0.18	56	MALIEYC07CB410N02□	
1000	35 x 45	2.41	0.17	0.23	0.18	63	MALIEYC07CC410N02□	
1200	35 x 45	2.46	0.17	0.19	0.16	63	MALIEYC07CC412N02□	
1200	35 x 50	2.65	0.17	0.19	0.16	70	MALIEYC07CD412N02□	
400	68	22 x 25	0.51	0.16	3.12	1.95	13	MALIEYC07LU268X02□
	82	22 x 30	0.60	0.14	2.26	1.52	16	MALIEYC07LV282X02□
	82	25 x 25	0.60	0.14	2.26	1.52	19	MALIEYC07AU282X02□
	100	22 x 35	0.69	0.14	1.86	1.24	19	MALIEYC07LA310X02□
	100	25 x 30	0.70	0.14	1.86	1.24	21	MALIEYC07AV310X02□
	120	22 x 35	0.76	0.14	1.55	1.10	19	MALIEYC07LA312X02□
	120	25 x 30	0.76	0.14	1.55	1.10	21	MALIEYC07AV312X02□
	120	30 x 25	0.77	0.14	1.55	1.10	25	MALIEYC07BU312X02□
	150	22 x 40	0.86	0.15	1.33	0.86	22	MALIEYC07LB315X02□
	150	25 x 35	0.89	0.15	1.33	0.86	25	MALIEYC07AA315X02□
	150	30 x 30	0.92	0.15	1.33	0.86	30	MALIEYC07BV315X02□
	180	25 x 40	1.01	0.15	1.11	0.70	28	MALIEYC07AB318X02□
	180	30 x 30	0.99	0.15	1.11	0.70	30	MALIEYC07BV318X02□
	180	35 x 25	0.96	0.15	1.11	0.70	35	MALIEYC07CU318X02□
	220	25 x 45	1.15	0.15	0.90	0.59	32	MALIEYC07AC322X02□
	220	30 x 35	1.15	0.15	0.90	0.59	36	MALIEYC07BA322X02□
	220	35 x 30	1.14	0.15	0.90	0.59	42	MALIEYC07CV322X02□
	270	25 x 50	1.31	0.15	0.74	0.55	35	MALIEYC07AD327X02□
	270	30 x 40	1.30	0.15	0.74	0.55	41	MALIEYC07BB327X02□

ELECTRICAL DATA AND ORDERING INFORMATION								
U _R (V)	C _R 120 Hz (μF)	NOMINAL CASE SIZE Ø D x L (mm)	I _R 120 Hz 105 °C (A)	tan δ 120 Hz max.	R _{ESR} 120 Hz max. (Ω)	Z 10 kHz max. (Ω)	WEIGHT (g)	ORDERING CODE
400	270	35 x 30	1.21	0.15	0.74	0.55	42	MALIEYC07CV327X02□
	330	30 x 45	1.47	0.15	0.60	0.45	46	MALIEYC07BC333X02□
	330	35 x 35	1.40	0.15	0.60	0.45	49	MALIEYC07CA333X02□
	390	30 x 50	1.63	0.15	0.51	0.41	51	MALIEYC07BD339X02□
	390	35 x 40	1.57	0.15	0.51	0.41	56	MALIEYC07CB339X02□
	470	35 x 45	1.72	0.15	0.42	0.33	63	MALIEYC07CC347X02□
	560	35 x 50	1.84	0.17	0.40	0.28	70	MALIEYC07CD356X02□
	680	35 x 60	2.24	0.17	0.33	0.23	84	MALIEYC07CF368X02□
450	56	22 x 25	0.48	0.13	3.08	1.88	13	MALIEYC07LU256P02□
	68	22 x 30	0.56	0.12	2.34	1.53	16	MALIEYC07LV268P02□
	68	25 x 25	0.56	0.12	2.34	1.53	19	MALIEYC07AU268P02□
	82	22 x 35	0.64	0.13	2.1	1.29	19	MALIEYC07LA282P02□
	100	22 x 40	0.74	0.13	1.72	1.05	22	MALIEYC07LB310P02□
	100	25 x 30	0.71	0.13	1.72	1.05	21	MALIEYC07AV310P02□
	100	30 x 25	0.73	0.13	1.72	1.05	25	MALIEYC07BU310P02□
	120	25 x 35	0.82	0.13	1.44	0.89	25	MALIEYC07AA312P02□
	150	25 x 40	0.95	0.13	1.15	0.71	28	MALIEYC07AB315P02□
	150	30 x 30	0.93	0.13	1.15	0.71	30	MALIEYC07BV315P02□
	150	35 x 25	0.91	0.13	1.15	0.71	35	MALIEYC07CU315P02□
	180	25 x 45	1.07	0.13	0.96	0.61	32	MALIEYC07AC318P02□
	180	30 x 35	1.06	0.13	0.96	0.61	36	MALIEYC07BA318P02□
	220	30 x 40	1.21	0.12	0.72	0.53	41	MALIEYC07BB322P02□
	220	35 x 30	1.14	0.12	0.72	0.53	42	MALIEYC07CV322P02□
	270	30 x 45	1.37	0.14	0.69	0.45	46	MALIEYC07BC327P02□
	270	35 x 35	1.32	0.14	0.69	0.45	49	MALIEYC07CA327P02□
	330	30 x 50	1.54	0.14	0.56	0.39	51	MALIEYC07BD333P02□
	330	35 x 40	1.49	0.14	0.56	0.39	56	MALIEYC07CB333P02□
	390	35 x 45	1.61	0.14	0.48	0.34	63	MALIEYC07CC339P02□
470	35 x 50	1.72	0.14	0.4	0.29	70	MALIEYC07CD347P02□	
560	35 x 60	2.11	0.15	0.36	0.24	84	MALIEYC07CF356P02□	

ADDITIONAL ELECTRICAL DATA		
PARAMETER	CONDITIONS	VALUE
Voltage		
Surge voltage U _s	U _R ≤ 250 V	U _s = 1.15 x U _R
	U _R ≥ 400 V	U _s = 1.10 x U _R
Reverse voltage	-	U _{rev} ≤ 1 V
Current		
Leakage current I _L	U _R ≤ 100 V; U _R , 300 s U _R > 100 V; U _R , 300 s	I _L /μA ≤ 0.002 x C _R /μF x U _R /V + 4 I _L /μA ≤ 0.01 x C _R /μF x U _R /V
Equivalent series inductance ESL	All case dimensions	25 nH max.



Aluminum Capacitors
Power Printed Wiring Style

Vishay Roederstein

LIFETIME TABLE $U_R \leq 100\text{ V}$

INTERRELATION BETWEEN ALTERNATING CURRENT, AMBIENT TEMPERATURE AND LIFETIME																					
I/I_R (frequency-dependant)								LIFETIME MULTIPLIER L (DEPENDING ON I/I_R AND T_{amb})													
FREQUENCY (Hz)								AMBIENT TEMPERATURE T_{amb} (°C)													
50	100	120	250	500	1000	2500	10 K	40	45	50	55	60	65	70	75	80	85	90	95	100	105
0	0	0	0	0	0	0	0	879	514	291	162	90	51	29	17	10	6.2	3.9	2.6	1.83	1.34
0.18	0.20	0.20	0.21	0.22	0.22	0.23	0.24	833	486	275	153	85	48	27	16	9.5	5.9	3.8	2.6	1.80	1.33
0.36	0.40	0.40	0.42	0.43	0.44	0.45	0.47	763	443	252	141	78	44	25	15	8.9	5.6	3.6	2.4	1.73	1.28
0.55	0.59	0.60	0.62	0.65	0.67	0.68	0.71	680	397	226	126	71	40	23	13	8.2	5.1	3.4	2.3	1.65	1.23
0.73	0.79	0.80	0.83	0.86	0.89	0.90	0.94	588	342	192	107	60	34	20	12	7.2	4.6	3.0	2.1	1.50	1.13
0.91	0.99	1.00	1.04	1.08	1.11	1.13	1.18	470	268	150	84	47	27	16	9.5	5.9	3.8	2.6	1.8	1.31	1.00
1.09	1.19	1.20	1.25	1.30	1.33	1.36	1.42	322	181	101	56	32	19	11	6.8	4.3	2.8	2.0	1.4	1.05	
1.27	1.39	1.40	1.46	1.51	1.55	1.58	1.65	179	95	52	29	17	10	6.5	4.2	2.8	1.9	1.4	1.0		
1.46	1.58	1.60	1.66	1.73	1.78	1.81	1.89	83	47	27	16	10	6.1	3.9	2.6	1.8	1.3				
1.64	1.78	1.80	1.87	1.94	2.00	2.03	2.12	36	21	13	7.8	5.0	3.3	2.2	1.6	1.2					
1.82	1.98	2.00	2.08	2.16	2.22	2.26	2.36	18	11	6.6	4.2	2.8	1.9	1.3	1.0						
2.00	2.18	2.20	2.29	2.38	2.44	2.49	2.60	7.4	4.9	3.2	2.2	1.5	1.0								
2.18	2.38	2.40	2.50	2.59	2.66	2.71	2.83	3.3	2.3	1.6	1.2										
2.37	2.57	2.60	2.70	2.81	2.89	2.94	3.07	1.5	1.2												

combination
not
permitted

Notes

I_R Rated ripple current (120 Hz, RMS) (A) at upper category temperature T_{UC} taken from datasheet

I User ripple current (A)

T_{amb} Ambient temperature of capacitor (°C)

L Lifetime multiplier

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

LIFETIME TABLE $U_R > 100\text{ V}$

INTERRELATION BETWEEN ALTERNATING CURRENT, AMBIENT TEMPERATURE AND LIFETIME																					
I/I_R (frequency-dependant)								LIFETIME MULTIPLIER L (DEPENDING ON I/I_R AND T_{amb})													
FREQUENCY (Hz)								AMBIENT TEMPERATURE T_{amb} (°C)													
50	100	120	250	500	1000	2500	10 K	40	45	50	55	60	65	70	75	80	85	90	95	100	105
0	0	0	0	0	0	0	0	879	514	291	162	90	51	29	17	10	6.2	3.9	2.6	1.83	1.34
0.17	0.19	0.20	0.23	0.25	0.26	0.27	0.28	833	486	275	153	85	48	27	16	9.5	5.9	3.8	2.6	1.80	1.33
0.33	0.39	0.40	0.46	0.50	0.52	0.54	0.56	763	443	252	141	78	44	25	15	8.9	5.6	3.6	2.4	1.73	1.28
0.50	0.58	0.60	0.68	0.74	0.78	0.81	0.84	680	397	226	126	71	40	23	13	8.2	5.1	3.4	2.3	1.65	1.23
0.66	0.78	0.80	0.91	0.99	1.04	1.08	1.12	588	342	192	107	60	34	20	12	7.2	4.6	3.0	2.1	1.50	1.13
0.83	0.97	1.00	1.14	1.24	1.30	1.35	1.40	470	268	150	84	47	27	16	9.5	5.9	3.8	2.6	1.8	1.31	1.00
1.00	1.16	1.20	1.37	1.49	1.56	1.62	1.68	322	181	101	56	32	19	11	6.8	4.3	2.8	2.0	1.4	1.05	
1.16	1.36	1.40	1.60	1.74	1.82	1.89	1.96	179	95	52	29	17	10	6.5	4.2	2.8	1.9	1.4	1.0		
1.33	1.55	1.60	1.82	1.98	2.08	2.16	2.24	83	47	27	16	10	6.1	3.9	2.6	1.8	1.3				
1.49	1.75	1.80	2.05	2.23	2.34	2.43	2.52	36	21	13	7.8	5.0	3.3	2.2	1.6	1.2					
1.66	1.94	2.00	2.28	2.48	2.60	2.70	2.80	18	11	6.6	4.2	2.8	1.9	1.3	1.0						
1.83	2.13	2.20	2.51	2.73	2.86	2.97	3.08	7.4	4.9	3.2	2.2	1.5	1.0								
1.99	2.33	2.40	2.74	2.98	3.12	3.24	3.36	3.3	2.3	1.6	1.2										
2.16	2.52	2.60	2.96	3.22	3.38	3.51	3.64	1.5	1.2												

combination
not
permitted

Notes

I_R Rated ripple current (120 Hz, RMS) (A) at upper category temperature T_{UC} taken from datasheet

I User ripple current (A)

T_{amb} Ambient temperature of capacitor (°C)

L Lifetime multiplier

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



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