Aluminum Capacitors
Standard - 105 °C Snap-In





FEATURES

- Useful life: 2000 h at +105 °C
- Polarized aluminum electrolytic capacitors
- Small dimensions
- High C x U product
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT

APPLICATIONS

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

QUICK REFERENCE DATA		
DESCRIPTION	**UNIT**	**VALUE**
Nominal case size (Ø D x L)	mm	22 x 25 to 40 x 60
Rated capacitance range C_R	µF	820 to 68 000
Capacitance tolerance	%	± 20
Rated voltage range, U_R	V	6.3 to 100
Category temperature range	°C	-40 to +105
Load life at 105 °C	h	2000
Shelf life at 0 V, 105 °C	h	1000
Based on sectional specifications		IEC 60384-4 / EN 130300
Climatic category IEC 60068		40 / 105 / 56

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

C_R (µF)	U_R (V)								
	6.3	**10**	**16**	**25**	**35**	**50**	**63**	**80**	**100**
820	-	-	-	-	-	-	-	22 x 25	22 x 30 25 x 25
1000	-	-	-	-	-	-	-	22 x 30 25 x 25	22 x 35 25 x 30
1200	-	-	-	-	-	-	22 x 25	22 x 30 25 x 25	22 x 40 25 x 35 30 x 25
1500	-	-	-	-	-	-	22 x 30 25 x 25	22 x 35 25 x 30	22 x 45 25 x 40 30 x 30
1800	-	-	-	-	-	-	22 x 30 25 x 25	22 x 40 25 x 35 30 x 25	25 x 45 30 x 35
2200	-	-	-	-	-	-	22 x 35 25 x 30	22 x 45 25 x 35 30 x 30	25 x 50 30 x 40 35 x 30
2700	-	-	-	-	-	22 x 30	22 x 40 25 x 30 30 x 25	25 x 45 30 x 35	30 x 45 35 x 35

For technical questions, contact: aluminumcaps3@vishay.com
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

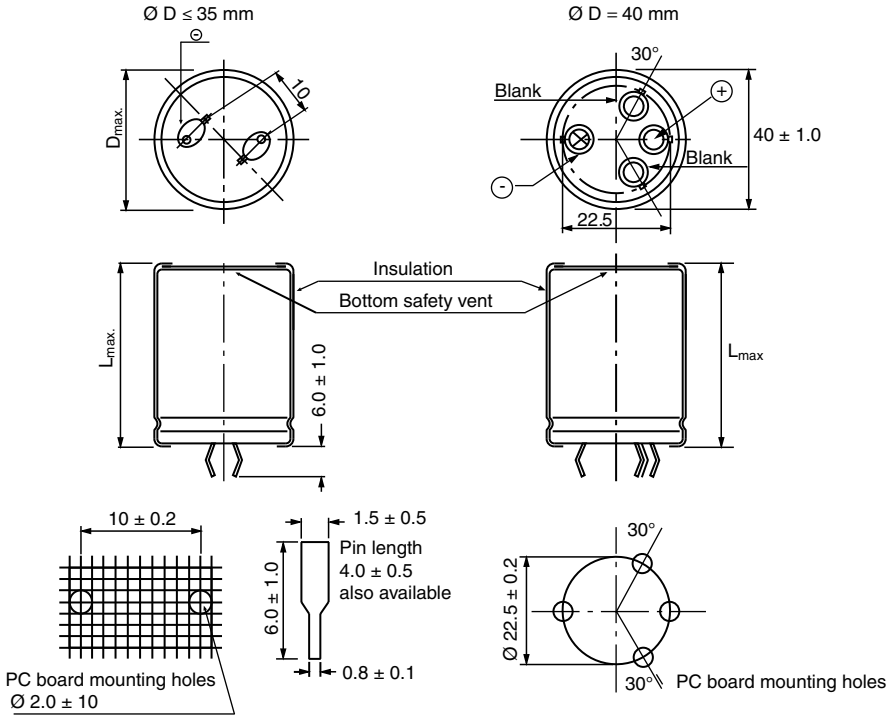
SELECTION CHART FOR C_R, U_R, AND RELEVANT NOMINAL CASE SIZES (Ø D x L in mm)

C_R (µF)	U_R (V)								
	6.3	10	16	25	35	50	63	80	100
3300	-	-	-	-	22 x 25	22 x 35	22 x 50 25 x 40 30 x 30	25 x 50 30 x 40 35 x 30	30 x 50 35 x 40
3900	-	-	-	-	22 x 30	22 x 40 25 x 35 30 x 25	25 x 45 30 x 35	30 x 45 35 x 35	35 x 45
4700	-	-	-	22 x 25	22 x 35 25 x 25	22 x 45 25 x 40 30 x 30	25 x 50 30 x 40 35 x 30	30 x 50 35 x 40	35 x 50 40 x 40
5600	-	-	-	22 x 30	22 x 35 25 x 30	22 x 50 25 x 40 30 x 35	30 x 45 35 x 35	35 x 45	40 x 50
6800	-	-	-	22 x 30	22 x 40 25 x 35 30 x 30	25 x 50 30 x 40 35 x 30	30 x 50 35 x 40	40 x 40	40 x 50
8200	-	-	22 x 25	22 x 35 25 x 30	22 x 50 25 x 40 30 x 30	30 x 45 35 x 35	35 x 45	40 x 50	-
10 000	-	22 x 25	22 x 30 25 x 25	22 x 40 25 x 35	25 x 45 30 x 35	30 x 50 35 x 40	35 x 50 40 x 40	-	-
12 000	22 x 25	22 x 30	22 x 35 25 x 30 30 x 25	22 x 45 25 x 40 30 x 30	25 x 50 35 x 30	35 x 45	-	-	-
15 000	22 x 30	22 x 35 25 x 25	22 x 40 25 x 35 30 x 30	25 x 45 30 x 35 35 x 30	35 x 35	35 x 50 40 x 40	-	-	-
18 000	22 x 35 25 x 25	22 x 35 25 x 30	22 x 45 25 x 40 30 x 30	25 x 50 30 x 40 35 x 35	35 x 40	40 x 50	-	-	-
22 000	22 x 35 25 x 30	22 x 40 25 x 35 30 x 25	25 x 45 30 x 35	30 x 45 35 x 35	35 x 45 40 x 40	40 x 50	-	-	-
27 000	22 x 40 25 x 35 30 x 25	22 x 50 25 x 40 30 x 30	25 x 50 30 x 40 35 x 30	35 x 45 40 x 40	40 x 50	40 x 60	-	-	-
33 000	22 x 50 25 x 40 30 x 30	25 x 45 30 x 35	30 x 45 35 x 35	-	-	-	-	-	-
39 000	25 x 45 30 x 35	25 x 50 30 x 40 35 x 30	30 x 50 35 x 40	-	-	-	-	-	-
47 000	25 x 50 30 x 40 35 x 30	30 x 45 35 x 35	35 x 45 40 x 40	-	-	-	-	-	-
56 000	30 x 50 35 x 40	35 x 45 40 x 40	40 x 50	-	-	-	-	-	-
68 000	35 x 45 40 x 40	40 x 50	40 x 60	-	-	-	-	-	-

For technical questions, contact: aluminumcaps3@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

DIMENSIONS in millimeters **AND AVAILABLE FORMS**



DIMENSIONS in millimeters, **MASS AND PACKAGING QUANTITIES**			
NOMINAL CASE SIZE Ø D x L	**MAXIMUM SIZE Ø $D_{max.}$ x $L_{max.}$**	**MASS (g)**	**PACKAGING QUANTITIES (units per box)**
22 x 25	23 x 27	14	200
22 x 30	23 x 32	16	
22 x 35	23 x 37	19	
22 x 40	23 x 42	22	
22 x 45	23 x 47	24	
22 x 50	23 x 52	27	
25 x 25	26.4 x 27	18	150
25 x 30	26.4 x 32	21	
25 x 35	26.4 x 37	25	
25 x 40	26.4 x 42	28	
25 x 45	26.4 x 47	31	
25 x 50	26.4 x 52	35	
30 x 25	31 x 27	25	100
30 x 30	31 x 32	30	
30 x 35	31 x 37	35	
30 x 40	31 x 42	40	
30 x 45	31 x 47	45	
30 x 50	31 x 52	50	
35 x 30	36 x 32	41	50
35 x 35	36 x 37	48	
35 x 40	36 x 42	55	
35 x 45	36 x 47	62	
35 x 50	36 x 52	68	
40 x 40	41 x 42	72	
40 x 50	41 x 52	89	
40 x 60	41 x 62	106	

For technical questions, contact: aluminumcaps3@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

ELECTRICAL DATA	
SYMBOL	DESCRIPTION
C_R	Rated capacitance at 120 Hz
U_R	Rated voltage
ESR	Max. equivalent series resistance at 120 Hz
I_R	Rated RMS ripple current at 120 Hz, 105 °C
T_{amb}	Ambient temperature
RH	Relative humidity
P	Ambient pressure

Note

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

ORDERING EXAMPLE

Electrolytic capacitor EYH series

4700 µF / 35 V; ± 20 %
Nominal case size: 22 mm x 35 mm
snap-in pin 4 mm, fully insulated

Ordering code: MALIEYH07LA447F42K

ELECTRICAL DATA AND ORDERING INFORMATION

U_R (V)	C_R 120 Hz (µF)	NOMINAL CASE SIZE D x L (mm)	I_R 120 Hz (A)	I_{L5} (µA)	ESR 120 Hz MAX. (Ω)	ORDERING CODE 6 mm PIN LENGTH	ORDERING CODE 4 mm PIN LENGTH
6.3	12 000	22 x 25	2.19	825	0.055	MALIEYH07LU512B02K	MALIEYH07LU512B42K
	15 000	22 x 30	2.53	922	0.047	MALIEYH07LV515B02K	MALIEYH07LV515B42K
	18 000	22 x 35	2.85	1010	0.041	MALIEYH07LA518B02K	MALIEYH07LA518B42K
	18 000	25 x 25	2.77	1010	0.041	MALIEYH07AU518B02K	MALIEYH07AU518B42K
	22 000	22 x 35	3.04	1117	0.036	MALIEYH07LA522B02K	MALIEYH07LA522B42K
	22 000	25 x 30	3.15	1117	0.036	MALIEYH07AV522B02K	MALIEYH07AV522B42K
	27 000	22 x 40	3.40	1237	0.032	MALIEYH07LB527B02K	MALIEYH07LB527B42K
	27 000	25 x 35	3.53	1237	0.032	MALIEYH07AA527B02K	MALIEYH07AA527B42K
	27 000	30 x 25	3.42	1237	0.032	MALIEYH07BU527B02K	MALIEYH07BU527B42K
	33 000	22 x 50	3.92	1368	0.029	MALIEYH07LD533B02K	MALIEYH07LD533B42K
	33 000	25 x 40	3.91	1368	0.029	MALIEYH07AB533B02K	MALIEYH07AB533B42K
	33 000	30 x 30	3.83	1368	0.029	MALIEYH07BV533B02K	MALIEYH07BV533B42K
	39 000	25 x 45	4.26	1487	0.026	MALIEYH07AC539B02K	MALIEYH07AC539B42K
	39 000	30 x 35	4.20	1487	0.026	MALIEYH07BA539B02K	MALIEYH07BA539B42K
	47 000	25 x 50	4.63	1632	0.024	MALIEYH07AD547B02K	MALIEYH07AD547B42K
	47 000	30 x 40	4.60	1632	0.024	MALIEYH07BB547B02K	MALIEYH07BB547B42K
	47 000	35 x 30	4.50	1632	0.024	MALIEYH07CV547B02K	MALIEYH07CV547B42K
	56 000	30 x 50	5.17	1782	0.022	MALIEYH07BD556B02K	MALIEYH07BD556B42K
	56 000	35 x 40	5.12	1782	0.022	MALIEYH07CB556B02K	MALIEYH07CB556B42K
	68 000	35 x 45	5.52	1964	0.021	MALIEYH07CC568B02K	MALIEYH07CC568B42K
	68 000	40 x 40	5.62	1964	0.021	MALIEYH07DB568B02K	MALIEYH07DB568B42K
10	10 000	22 x 25	2.17	949	0.066	MALIEYH07LU510C02K	MALIEYH07LU510C42K
	12 000	22 x 30	2.48	1039	0.057	MALIEYH07LV512C02K	MALIEYH07LV512C42K
	15 000	22 x 35	2.83	1162	0.049	MALIEYH07LA515C02K	MALIEYH07LA515C42K
	15 000	25 x 25	2.75	1162	0.049	MALIEYH07AU515C02K	MALIEYH07AU515C42K
	18 000	22 x 35	3.00	1273	0.043	MALIEYH07LA518C02K	MALIEYH07LA518C42K
	18 000	25 x 30	3.11	1273	0.043	MALIEYH07AV518C02K	MALIEYH07AV518C42K
	22 000	22 x 40	3.35	1407	0.037	MALIEYH07LB522C02K	MALIEYH07LB522C42K
	22 000	25 x 35	3.48	1407	0.037	MALIEYH07AA522C02K	MALIEYH07AA522C42K
	22 000	30 x 25	3.38	1407	0.037	MALIEYH07BU522C02K	MALIEYH07BU522C42K
	27 000	22 x 50	3.88	1559	0.033	MALIEYH07LD527C02K	MALIEYH07LD527C42K
	27 000	25 x 40	3.87	1559	0.033	MALIEYH07AB527C02K	MALIEYH07AB527C42K
	27 000	30 x 30	3.79	1559	0.033	MALIEYH07BV527C02K	MALIEYH07BV527C42K

For technical questions, contact: aluminumcaps3@vishay.com
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

ELECTRICAL DATA AND ORDERING INFORMATION

U_R (V)	C_R 120 Hz (µF)	NOMINAL CASE SIZE D x L (mm)	I_R 120 Hz (A)	I_{L5} (µA)	ESR 120 Hz MAX. (Ω)	ORDERING CODE 6 mm PIN LENGTH	ORDERING CODE 4 mm PIN LENGTH
10	33 000	25 x 45	4.26	1723	0.029	MALIEYH07AC533C02K	MALIEYH07AC533C42K
	33 000	30 x 35	4.20	1723	0.029	MALIEYH07BA533C02K	MALIEYH07BA533C42K
	39 000	25 x 50	4.60	1873	0.027	MALIEYH07AD539C02K	MALIEYH07AD539C42K
	39 000	30 x 40	4.57	1873	0.027	MALIEYH07BB539C02K	MALIEYH07BB539C42K
	39 000	35 x 30	4.46	1873	0.027	MALIEYH07CV539C02K	MALIEYH07CV539C42K
	47 000	30 x 45	4.95	2057	0.025	MALIEYH07BC547C02K	MALIEYH07BC547C42K
	47 000	35 x 35	4.87	2057	0.025	MALIEYH07CA547C02K	MALIEYH07CA547C42K
	56 000	35 x 45	5.49	2245	0.023	MALIEYH07CC556C02K	MALIEYH07CC556C42K
	56 000	40 x 40	5.59	2245	0.023	MALIEYH07DB556C02K	MALIEYH07DB556C42K
	68 000	40 x 50	6.22	2474	0.021	MALIEYH07DD568C02K	MALIEYH07DD568C42K
16	8200	22 x 25	2.14	1087	0.065	MALIEYH07LU482D02K	MALIEYH07LU482D42K
	10 000	22 x 30	2.48	1200	0.055	MALIEYH07LV510D02K	MALIEYH07LV510D42K
	10 000	25 x 25	2.56	1200	0.055	MALIEYH07AU510D02K	MALIEYH07AU510D42K
	12 000	22 x 35	2.80	1315	0.048	MALIEYH07LA512D02K	MALIEYH07LA512D42K
	12 000	25 x 30	2.90	1315	0.048	MALIEYH07AV512D02K	MALIEYH07AV512D42K
	12 000	30 x 25	2.97	1315	0.048	MALIEYH07BU512D02K	MALIEYH07BU512D42K
	15 000	22 x 40	3.17	1470	0.041	MALIEYH07LB515D02K	MALIEYH07LB515D42K
	15 000	25 x 35	3.29	1470	0.041	MALIEYH07AA515D02K	MALIEYH07AA515D42K
	15 000	30 x 30	3.38	1470	0.041	MALIEYH07BV515D02K	MALIEYH07BV515D42K
	18 000	22 x 45	3.50	1610	0.037	MALIEYH07LC518D02K	MALIEYH07LC518D42K
	18 000	25 x 40	3.65	1610	0.037	MALIEYH07AB518D02K	MALIEYH07AB518D42K
	18 000	30 x 30	3.57	1610	0.037	MALIEYH07BV518D02K	MALIEYH07BV518D42K
	22 000	25 x 45	4.03	1780	0.032	MALIEYH07AC522D02K	MALIEYH07AC522D42K
	22 000	30 x 35	3.98	1780	0.032	MALIEYH07BA522D02K	MALIEYH07BA522D42K
	27 000	25 x 50	4.42	1972	0.029	MALIEYH07AD527D02K	MALIEYH07AD527D42K
	27 000	30 x 40	4.39	1972	0.029	MALIEYH07BB527D02K	MALIEYH07BB527D42K
	27 000	35 x 30	4.29	1972	0.029	MALIEYH07CV527D02K	MALIEYH07CV527D42K
	33 000	30 x 45	4.79	2180	0.026	MALIEYH07BC533D02K	MALIEYH07BC533D42K
	33 000	35 x 35	4.71	2180	0.026	MALIEYH07CA533D02K	MALIEYH07CA533D42K
	39 000	30 x 50	5.16	2370	0.024	MALIEYH07BD539D02K	MALIEYH07BD539D42K
	39 000	35 x 40	5.10	2370	0.024	MALIEYH07CB539D02K	MALIEYH07CB539D42K
	47 000	35 x 45	5.50	2602	0.022	MALIEYH07CC547D02K	MALIEYH07CC547D42K
	47 000	40 x 40	5.60	2602	0.022	MALIEYH07DB547D02K	MALIEYH07DB547D42K
	56 000	40 x 50	6.22	2840	0.021	MALIEYH07DD556D02K	MALIEYH07DD556D42K
	68 000	40 x 60	6.83	3129	0.019	MALIEYH07DF568D02K	MALIEYH07DF568D42K
25	4700	22 x 25	1.73	1028	0.099	MALIEYH07LU447E02K	MALIEYH07LU447E42K
	5600	22 x 30	1.98	1122	0.085	MALIEYH07LV456E02K	MALIEYH07LV456E42K
	6800	22 x 30	2.14	1237	0.072	MALIEYH07LV468E02K	MALIEYH07LV468E42K
	8200	22 x 35	2.42	1358	0.062	MALIEYH07LA482E02K	MALIEYH07LA482E42K
	8200	25 x 30	2.50	1358	0.062	MALIEYH07AV482E02K	MALIEYH07AV482E42K
	10 000	22 x 40	2.77	1500	0.053	MALIEYH07LB510E02K	MALIEYH07LB510E42K
	10 000	25 x 35	2.88	1500	0.053	MALIEYH07AA510E02K	MALIEYH07AA510E42K
	12 000	22 x 45	3.09	1643	0.047	MALIEYH07LC512E02K	MALIEYH07LC512E42K
	12 000	25 x 40	3.22	1643	0.047	MALIEYH07AB512E02K	MALIEYH07AB512E42K
	12 000	30 x 30	3.15	1643	0.047	MALIEYH07BV512E02K	MALIEYH07BV512E42K
	15 000	25 x 45	3.62	1837	0.040	MALIEYH07AC515E02K	MALIEYH07AC515E42K
	15 000	30 x 35	3.57	1837	0.040	MALIEYH07BA515E02K	MALIEYH07BA515E42K
	15 000	35 x 30	3.65	1837	0.040	MALIEYH07CV515E02K	MALIEYH07CV515E42K
	18 000	25 x 50	3.98	2012	0.036	MALIEYH07AD518E02K	MALIEYH07AD518E42K
	18 000	30 x 40	3.95	2012	0.036	MALIEYH07BB518E02K	MALIEYH07BB518E42K
	18 000	35 x 35	4.06	2012	0.036	MALIEYH07CA518E02K	MALIEYH07CA518E42K
	22 000	30 x 45	4.36	2225	0.032	MALIEYH07BC522E02K	MALIEYH07BC522E42K
	22 000	35 x 35	4.28	2225	0.032	MALIEYH07CA522E02K	MALIEYH07CA522E42K
	27 000	35 x 45	4.92	2465	0.028	MALIEYH07CC527E02K	MALIEYH07CC527E42K
	27 000	40 x 40	5.01	2465	0.028	MALIEYH07DB527E02K	MALIEYH07DB527E42K

For technical questions, contact: aluminumcaps3@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

ELECTRICAL DATA AND ORDERING INFORMATION

U_R (V)	C_R 120 Hz (µF)	NOMINAL CASE SIZE D x L (mm)	I_R 120 Hz (A)	I_{L5} (µA)	ESR 120 Hz MAX. (Ω)	ORDERING CODE 6 mm PIN LENGTH	ORDERING CODE 4 mm PIN LENGTH
35	3300	22 x 25	1.62	1020	0.141	MALIEYH07LU433F02K	MALIEYH07LU433F42K
	3900	22 x 30	1.88	1108	0.121	MALIEYH07LV439F02K	MALIEYH07LV439F42K
	4700	22 x 35	2.14	1217	0.103	MALIEYH07LA447F02K	MALIEYH07LA447F42K
	4700	25 x 25	2.09	1217	0.103	MALIEYH07AU447F02K	MALIEYH07AU447F42K
	5600	22 x 35	2.29	1328	0.088	MALIEYH07LA456F02K	MALIEYH07LA456F42K
	5600	25 x 30	2.37	1328	0.088	MALIEYH07AV456F02K	MALIEYH07AV456F42K
	6800	22 x 40	2.61	1464	0.075	MALIEYH07LB468F02K	MALIEYH07LB468F42K
	6800	25 x 35	2.71	1464	0.075	MALIEYH07AA468F02K	MALIEYH07AA468F42K
	6800	30 x 30	2.79	1464	0.075	MALIEYH07BV468F02K	MALIEYH07BV468F42K
	8200	22 x 50	3.02	1607	0.065	MALIEYH07LD482F02K	MALIEYH07LD482F42K
	8200	25 x 40	3.02	1607	0.065	MALIEYH07AB482F02K	MALIEYH07AB482F42K
	8200	30 x 30	2.95	1607	0.065	MALIEYH07BV482F02K	MALIEYH07BV482F42K
	10 000	25 x 45	3.43	1775	0.055	MALIEYH07AC510F02K	MALIEYH07AC510F42K
	10 000	30 x 35	3.38	1775	0.055	MALIEYH07BA510F02K	MALIEYH07BA510F42K
	12 000	25 x 50	3.78	1944	0.048	MALIEYH07AD512F02K	MALIEYH07AD512F42K
	12 000	35 x 30	3.67	1944	0.048	MALIEYH07CV512F02K	MALIEYH07CV512F42K
	15 000	35 x 35	4.12	2174	0.041	MALIEYH07CA515F02K	MALIEYH07CA515F42K
	18 000	35 x 40	4.52	2381	0.037	MALIEYH07CB518F02K	MALIEYH07CB518F42K
	22 000	35 x 45	4.95	2632	0.032	MALIEYH07CC522F02K	MALIEYH07CC522F42K
	22 000	40 x 40	5.04	2632	0.032	MALIEYH07DB522F02K	MALIEYH07DB522F42K
	27 000	40 x 50	5.92	2916	0.029	MALIEYH07DD527F02K	MALIEYH07DD527F42K
50	2700	22 x 30	1.94	1102	0.123	MALIEYH07LV427H02K	MALIEYH07LV427H42K
	3300	22 x 35	2.20	1219	0.103	MALIEYH07LA433H02K	MALIEYH07LA433H42K
	3900	22 x 40	2.52	1325	0.089	MALIEYH07LB439H02K	MALIEYH07LB439H42K
	3900	25 x 35	2.62	1325	0.089	MALIEYH07AA439H02K	MALIEYH07AA439H42K
	3900	30 x 25	2.54	1325	0.089	MALIEYH07BU439H02K	MALIEYH07BU439H42K
	4700	22 x 45	2.81	1454	0.076	MALIEYH07LC447H02K	MALIEYH07LC447H42K
	4700	25 x 40	2.93	1454	0.076	MALIEYH07AB447H02K	MALIEYH07AB447H42K
	4700	30 x 30	2.87	1454	0.076	MALIEYH07BV447H02K	MALIEYH07BV447H42K
	5600	22 x 50	3.11	1587	0.066	MALIEYH07LD456H02K	MALIEYH07LD456H42K
	5600	25 x 40	3.11	1587	0.066	MALIEYH07AB456H02K	MALIEYH07AB456H42K
	5600	30 x 35	3.21	1587	0.066	MALIEYH07BA456H02K	MALIEYH07BA456H42K
	6800	25 x 50	3.64	1749	0.057	MALIEYH07AD468H02K	MALIEYH07AD468H42K
	6800	30 x 40	3.61	1749	0.057	MALIEYH07BB468H02K	MALIEYH07BB468H42K
	6800	35 x 30	3.53	1749	0.057	MALIEYH07CV468H02K	MALIEYH07CV468H42K
	8200	30 x 45	3.94	1921	0.049	MALIEYH07BC482H02K	MALIEYH07BC482H42K
	8200	35 x 35	3.87	1921	0.049	MALIEYH07CA482H02K	MALIEYH07CA482H42K
	10 000	30 x 50	4.42	2121	0.043	MALIEYH07BD510H02K	MALIEYH07BD510H42K
	10 000	35 x 40	4.37	2121	0.043	MALIEYH07CB510H02K	MALIEYH07CB510H42K
	12 000	35 x 45	4.78	2324	0.038	MALIEYH07CC512H02K	MALIEYH07CC512H42K
	15 000	35 x 50	5.24	2598	0.033	MALIEYH07CD515H02K	MALIEYH07CD515H42K
	15 000	40 x 40	5.13	2598	0.033	MALIEYH07DB515H02K	MALIEYH07DB515H42K
	18 000	40 x 50	5.76	2846	0.030	MALIEYH07DD518H02K	MALIEYH07DD518H42K
	22 000	40 x 50	5.98	3146	0.027	MALIEYH07DD522H02K	MALIEYH07DD522H42K
	27 000	40 x 60	6.61	3486	0.024	MALIEYH07DF527H02K	MALIEYH07DF527H42K
63	1200	22 x 25	1.37	825	0.276	MALIEYH07LU412J02K	MALIEYH07LU412J42K
	1500	22 x 30	1.50	922	0.224	MALIEYH07LV415J02K	MALIEYH07LV415J42K
	1500	25 x 25	1.54	922	0.224	MALIEYH07AU415J02K	MALIEYH07AU415J42K
	1800	22 x 30	1.64	1010	0.189	MALIEYH07LV418J02K	MALIEYH07LV418J42K
	1800	25 x 25	1.69	1010	0.189	MALIEYH07AU418J02K	MALIEYH07AU418J42K
	2200	22 x 35	1.86	1117	0.157	MALIEYH07LA422J02K	MALIEYH07LA422J42K
	2200	25 x 30	1.92	1117	0.157	MALIEYH07AV422J02K	MALIEYH07AV422J42K
	2700	22 x 40	2.17	1237	0.130	MALIEYH07LB427J02K	MALIEYH07LB427J42K
	2700	25 x 30	2.13	1237	0.130	MALIEYH07AV427J02K	MALIEYH07AV427J42K
	2700	30 x 25	2.18	1237	0.130	MALIEYH07BU427J02K	MALIEYH07BU427J42K

For technical questions, contact: aluminumcaps3@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

ELECTRICAL DATA AND ORDERING INFORMATION

U_R (V)	C_R 120 Hz (µF)	NOMINAL CASE SIZE D x L (mm)	I_R 120 Hz (A)	I_{L5} (µA)	ESR 120 Hz MAX. (Ω)	ORDERING CODE 6 mm PIN LENGTH	ORDERING CODE 4 mm PIN LENGTH
63	3300	22 x 50	2.53	1368	0.109	MALIEYH07LD433J02K	MALIEYH07LD433J42K
	3300	25 x 40	2.53	1368	0.109	MALIEYH07AB433J02K	MALIEYH07AB433J42K
	3300	30 x 30	2.48	1368	0.109	MALIEYH07BV433J02K	MALIEYH07BV433J42K
	3900	25 x 45	2.88	1487	0.094	MALIEYH07AC439J02K	MALIEYH07AC439J42K
	3900	30 x 35	2.84	1487	0.094	MALIEYH07BA439J02K	MALIEYH07BA439J42K
	4700	25 x 50	3.20	1632	0.080	MALIEYH07AD447J02K	MALIEYH07AD447J42K
	4700	30 x 40	3.17	1632	0.080	MALIEYH07BB447J02K	MALIEYH07BB447J42K
	4700	35 x 30	3.10	1632	0.080	MALIEYH07CV447J02K	MALIEYH07CV447J42K
	5600	30 x 45	3.51	1782	0.070	MALIEYH07BC456J02K	MALIEYH07BC456J42K
	5600	35 x 35	3.46	1782	0.070	MALIEYH07CA456J02K	MALIEYH07CA456J42K
	6800	30 x 50	3.92	1964	0.060	MALIEYH07BD468J02K	MALIEYH07BD468J42K
	6800	35 x 40	3.88	1964	0.060	MALIEYH07CB468J02K	MALIEYH07CB468J42K
	8200	35 x 45	4.22	2156	0.052	MALIEYH07CC482J02K	MALIEYH07CC482J42K
	10 000	35 x 50	4.74	2381	0.045	MALIEYH07CD510J02K	MALIEYH07CD510J42K
	10 000	40 x 40	4.64	2381	0.045	MALIEYH07DB510J02K	MALIEYH07DB510J42K
80	820	22 x 25	1.37	768	0.323	MALIEYH07LU382W02K	MALIEYH07LU382W42K
	1000	22 x 30	1.62	849	0.268	MALIEYH07LV410W02K	MALIEYH07LV410W42K
	1000	25 x 25	1.67	849	0.268	MALIEYH07AU410W02K	MALIEYH07AU410W42K
	1200	22 x 30	1.67	930	0.225	MALIEYH07LV412W02K	MALIEYH07LV412W42K
	1200	25 x 25	1.72	930	0.225	MALIEYH07AU412W02K	MALIEYH07AU412W42K
	1500	22 x 35	1.98	1039	0.183	MALIEYH07LA415W02K	MALIEYH07LA415W42K
	1500	25 x 30	2.05	1039	0.183	MALIEYH07AV415W02K	MALIEYH07AV415W42K
	1800	22 x 40	2.28	1138	0.155	MALIEYH07LB418W02K	MALIEYH07LB418W42K
	1800	25 x 35	2.37	1138	0.155	MALIEYH07AA418W02K	MALIEYH07AA418W42K
	1800	30 x 25	2.30	1138	0.155	MALIEYH07BU418W02K	MALIEYH07BU418W42K
	2200	22 x 45	2.51	1259	0.129	MALIEYH07LC422W02K	MALIEYH07LC422W42K
	2200	25 x 35	2.49	1259	0.129	MALIEYH07AA422W02K	MALIEYH07AA422W42K
	2200	30 x 30	2.56	1259	0.129	MALIEYH07BV422W02K	MALIEYH07BV422W42K
	2700	25 x 45	3.03	1394	0.107	MALIEYH07AC427W02K	MALIEYH07AC427W42K
	2700	30 x 35	2.99	1394	0.107	MALIEYH07BA427W02K	MALIEYH07BA427W42K
	3300	25 x 50	3.33	1541	0.090	MALIEYH07AD433W02K	MALIEYH07AD433W42K
	3300	30 x 40	3.30	1541	0.090	MALIEYH07BB433W02K	MALIEYH07BB433W42K
	3300	35 x 30	3.23	1541	0.090	MALIEYH07CV433W02K	MALIEYH07CV433W42K
	3900	30 x 45	3.75	1676	0.078	MALIEYH07BC439W02K	MALIEYH07BC439W42K
	3900	35 x 35	3.69	1676	0.078	MALIEYH07CA439W02K	MALIEYH07CA439W42K
	4700	30 x 50	4.10	1840	0.067	MALIEYH07BD447W02K	MALIEYH07BD447W42K
	4700	35 x 40	4.06	1840	0.067	MALIEYH07CB447W02K	MALIEYH07CB447W42K
	5600	35 x 45	4.44	2008	0.059	MALIEYH07CC456W02K	MALIEYH07CC456W42K
	6800	40 x 40	4.80	2213	0.051	MALIEYH07DB468W02K	MALIEYH07DB468W42K
	8200	40 x 50	5.32	2430	0.044	MALIEYH07DD482W02K	MALIEYH07DD482W42K
100	820	22 x 30	1.16	859	0.323	MALIEYH07LV382L02K	MALIEYH07LV382L42K
	820	25 x 25	1.51	859	0.323	MALIEYH07AU382L02K	MALIEYH07AU382L42K
	1000	22 x 35	1.71	949	0.268	MALIEYH07LA410L02K	MALIEYH07LA410L42K
	1000	25 x 30	1.77	949	0.268	MALIEYH07AV410L02K	MALIEYH07AV410L42K
	1200	22 x 40	1.86	1039	0.225	MALIEYH07LB412L02K	MALIEYH07LB412L42K
	1200	25 x 35	1.94	1039	0.225	MALIEYH07AA412L02K	MALIEYH07AA412L42K
	1200	30 x 25	1.88	1039	0.225	MALIEYH07BU412L02K	MALIEYH07BU412L42K
	1500	22 x 45	2.18	1162	0.183	MALIEYH07LC415L02K	MALIEYH07LC415L42K
	1500	25 x 40	2.28	1162	0.183	MALIEYH07AB415L02K	MALIEYH07AB415L42K
	1500	30 x 30	2.23	1162	0.183	MALIEYH07BV415L02K	MALIEYH07BV415L42K
	1800	25 x 45	2.61	1273	0.155	MALIEYH07AC418L02K	MALIEYH07AC418L42K
	1800	30 x 35	2.57	1273	0.155	MALIEYH07BA418L02K	MALIEYH07BA418L42K
	2200	25 x 50	2.85	1407	0.129	MALIEYH07AD422L02K	MALIEYH07AD422L42K
	2200	30 x 40	2.83	1407	0.129	MALIEYH07BB422L02K	MALIEYH07BB422L42K
	2200	35 x 30	2.76	1407	0.129	MALIEYH07CV422L02K	MALIEYH07CV422L42K

For technical questions, contact: aluminumcaps3@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

ELECTRICAL DATA AND ORDERING INFORMATION

U_R (V)	C_R 120 Hz (µF)	NOMINAL CASE SIZE D x L (mm)	I_R 120 Hz (A)	I_{L5} (µA)	ESR 120 Hz MAX. (Ω)	ORDERING CODE 6 mm PIN LENGTH	ORDERING CODE 4 mm PIN LENGTH
100	2700	30 x 45	3.27	1559	0.107	MALIEYH07BC427L02K	MALIEYH07BC427L42K
	2700	35 x 35	3.22	1559	0.107	MALIEYH07CA427L02K	MALIEYH07CA427L42K
	3300	30 x 50	3.59	1723	0.090	MALIEYH07BD433L02K	MALIEYH07BD433L42K
	3300	35 x 40	3.55	1723	0.090	MALIEYH07CB433L02K	MALIEYH07CB433L42K
	3900	35 x 45	4.03	1873	0.078	MALIEYH07CC439L02K	MALIEYH07CC439L42K
	4700	35 x 50	4.40	2057	0.067	MALIEYH07CD447L02K	MALIEYH07CD447L42K
	4700	40 x 40	4.31	2057	0.067	MALIEYH07DB447L02K	MALIEYH07DB447L42K
	5600	40 x 50	4.88	2245	0.059	MALIEYH07DD456L02K	MALIEYH07DD456L42K
	6800	40 x 50	5.18	2474	0.051	MALIEYH07DD468L02K	MALIEYH07DD468L42K

LIFETIME TABLE $U_R \leq 100$ V

INTERRELATION BETWEEN ALTERNATING CURRENT, AMBIENT TEMPERATURE AND LIFETIME

I / I_R (FREQUENCY DEPENDENT)							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	40	45	50	55	60	65	70	75	80	85	90	95	100	105
0	0	0	0	0	0	0	200	127	81	53	35	23	16	11	7.4	5.1	3.6	2.6	1.84	1.33
0.17	0.20	0.20	0.21	0.22	0.23	0.23	194	123	79	51	34	23	15	10	7.2	5.0	3.5	2.5	1.81	1.31
0.35	0.39	0.40	0.42	0.44	0.46	0.47	177	113	74	48	32	21	14	9.9	6.9	4.8	3.4	2.4	1.73	1.25
0.52	0.59	0.60	0.64	0.66	0.68	0.70	157	101	66	43	29	19	13	9.1	6.3	4.5	3.2	2.3	1.63	1.18
0.70	0.78	0.80	0.85	0.88	0.91	0.94	132	86	57	38	25	17	12	8.2	5.8	4.1	2.9	2.1	1.50	1.09
0.87	0.98	**1.00**	1.06	1.10	1.14	1.17	108	72	48	32	22	15	10	7.2	5.1	3.6	2.6	1.9	1.36	**1.00**
1.04	1.17	1.20	1.27	1.32	1.37	1.40	86	58	39	27	18	13	8.9	6.2	4.4	3.2	2.3	1.6	1.20	
1.22	1.37	1.40	1.48	1.54	1.60	1.64	67	46	31	22	15	11	7.4	5.3	3.8	2.7	2.0	1.4	1.05	
1.39	1.56	1.60	1.70	1.76	1.82	1.87	51	35	25	17	12	8.6	6.1	4.4	3.2	2.3	1.7	1.2		
1.57	1.76	1.80	1.91	1.98	2.05	2.11	38	27	19	14	9.7	6.9	5.0	3.6	2.6	1.9	1.4	1.0		
1.74	1.95	2.00	2.12	2.20	2.28	2.34	28	20	15	10	7.6	5.5	4.0	2.9	2.1	1.6	1.2			
1.91	2.15	2.20	2.33	2.42	2.51	2.57	20	15	11	7.9	5.8	4.3	3.1	2.3	1.7	1.3				
2.09	2.34	2.40	2.54	2.64	2.74	2.81	15	11	8.1	6	4.4	3.3	2.4	1.8	1.4	1.0				
2.26	2.54	2.60	2.76	2.86	2.96	3.04	11	7.9	5.9	4.4	3.3	2.5	1.9	1.4	1.1					
2.44	2.73	2.80	2.97	3.08	3.19	3.28	7.5	5.7	4.3	3.3	2.5	1.9	1.4	1.1						
2.61	2.93	3.00	3.18	3.30	3.42	3.51	5.3	4.1	3.1	2.4	1.8	1.4	1.1							
2.78	3.12	3.20	3.39	3.52	3.65	3.74	3.7	2.9	2.2	1.7	1.3	1.0								
2.96	3.32	3.40	3.60	3.74	3.88	3.98	2.5	2.0	1.6	1.2	1.0									
3.13	3.51	3.60	3.82	3.96	4.10	4.21	1.8	1.4	1.1											
3.31	3.71	3.80	4.03	4.18	4.33	4.45	1.2	1.0												

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

Statements about product lifetime are based on calculations and internal testing. They should only be interpreted as estimations. Also due to external factors, the lifetime in the field application may deviate from the calculated lifetime. In general, nothing stated herein shall be construed as a guarantee of durability.

For technical questions, contact: aluminumcaps3@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

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 in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

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

© 2022 VISHAY INTERTECHNOLOGY, INC. ALL RIGHTS RESERVED