Features

- 85℃, 2,000 hours assured
- For general purpose application
- RoHS Compliance

SPECIFICATIONS

Items	Performance
Operating Temperature Range	-40℃ ~ +85℃
Capacitance Tolerance	±20% (at 120Hz, 20℃)

Leakage Current (at 20℃)

Rated voltage	≦ 100V	> 100V	
Time	after 2 minutes	after 5 minutes	
Leakage Current	I = 0.02CV or 3 (μA) whichever is greater	CV ≦ 1,000 I = 0.03CV+15(μA)	CV > 1,000 I = 0.02CV+25(μA)

Where, C= rated capacitance in μF. V = rated DC working voltage in V.

Dissipation Factor (Tan δ at 120 Hz, 20℃)

Rated Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
Tan δ (max)	0.23	0.20	0.17	0.15	0.12	0.10	0.09	0.08	0.12	0.14	0.17	0.20	0.24	0.24

When the capacitance exceeds 1,000 μF, 0.02 shall be added every 1,000 μF increase.

Low Temperature Characteristics (at 120Hz)

Impedance ratio shall not exceed the values given in the table below.

Rated Voltage			6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
Impedance Ratio	Z(-25℃)/Z(+20℃)	φD<16	6	4	3	3	2	2	2	2	3	6	8	12	14	16
		φD≧16	8	6	4	4	3	3	3	3						
	Z(-40℃)/Z(+20℃)	φD<16	10	8	6	6	4	3	3	3	4	8	10	-	-	-
		φD≧16	18	16	12	10	8	8	6	6						

Load Life Test

Test Time	2,000 Hrs
Capacitance Change	Within ±20% of initial value
Dissipation Factor	Less than 200% of specified value
Leakage Current	Within specified value

* The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 2,000 hours at 85℃

Shelf Life Test

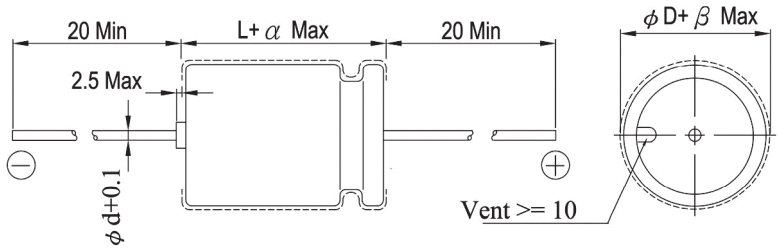
Test Time	1,000 Hrs
Capacitance Change	Within ±20% of initial value
Dissipation Factor	Less than 200% of specified value
Leakage Current	Within specified value

* The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 85℃ without voltage applied. The rated voltage shall be applied to the capacitors before the measurements for 160 ~ 450V (Refer to JIS C 5101-4 4.1).

Ripple Current & Frequency Multipliers

Cap.(μF) \ Freq.(Hz)	60 (50)	120	500	1K	10K up
Under 100	0.70	1.00	1.30	1.40	1.50
100 < C ≦ 1,000	0.75	1.00	1.20	1.30	1.35
1,000 up above	0.80	1.00	1.10	1.12	1.15

DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

φD	5	6.3	8	10	12.5	16	18	22	25
φd	0.6					0.8			
α	1.5			2.0					
β	0.5								

Dimension: φD × L(mm)
Ripple Current: mA/rms at 120 Hz, 85°C

DIMENSION & PERMISSIBLE RIPPLE CURRENT

V. DC / μF	Contents	6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)		63V (1J)		100V (2A)	
		φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA
0.10	0R1											5×12	1.5	5×12	3	5×12	3
0.22	R22											5×12	3.5	5×12	4.5	5×12	5
0.33	R33											5×12	5	5×12	7.5	5×12	8
0.47	R47											5×12	6	5×12	9	5×12	9
1.0	010											5×12	10	5×12	15	5×12	15
2.2	2R2											5×12	20	5×12	30	5×12	30
3.3	3R3											5×12	30	5×12	36	5×12	40
4.7	4R7											5×12	42	5×12	44	6.3×13	41
10	100							5×12	40	5×12	55	5×12	50	6.3×13	55	6.3×13	72
22	220					5×12	71	5×12	76	6.3×13	70	6.3×13	85	6.3×13	109	8×16	133
33	330					5×12	85	5×12	80	6.3×13	115	6.3×13	126	8×13	154	10×17	190
47	470	5×12	87	5×12	94	6.3×13	88	6.3×13	100	6.3×13	138	8×13	174	8×16	214	10×21	237
100	101	6.3×13	121	6.3×13	145	6.3×13	160	8×13	215	8×16	232	10×17	296	10×17	326	13×22	377
220	221	6.3×13	215	8×13	231	8×13	298	8×16	319	10×17	401	10×21	459	13×22	527	16×28	625
330	331	8×16	305	8×16	327	8×16	365	10×17	454	10×21	514	13×22	613	13×22	675	16×33	793
470	471	8×16	364	8×16	390	8×16	460	10×21	524	13×22	613	13×22	731	13×27	780	16×36	942
1,000	102	10×17	662	10×17	671	10×21	775	13×22	873	13×27	955	16×33	1,111	16×36	1,249	18×42	1,359
2,200	222	13×22	929	13×22	1,051	13×24	1,125	16×28	1,344	16×33	1,421	18×36	1,699	22×43	1,744	25×52	2,430
3,300	332	13×27	1,150	13×27	1,288	16×28	1,454	16×33	1,611	18×36	1,640	22×43	2,027	25×52	2,309		
4,700	472	13×27	1,354	16×28	1,552	16×33	1,650	18×36	1,881	22×43	2,280	25×43	2,347	25×52	2,710		
6,800	682	16×28	1,762	16×33	1,930	18×36	2,040	18×42	2,170	22×43	2,470	25×52	2,650				
10,000	103	16×36	2,062	18×36	2,122	18×42	2,503	22×43	2,893	25×52	3,180						

V. DC / μF	Contents	160V (2C)		200V (2D)		250V (2E)		350V (2V)		400V (2G)		450V (2W)	
		φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA	φD×L	mA
1.0	010	6.3 × 13	7	6.3 × 13	9	6.3 × 13	12	8 × 16	13	8 × 16	14	8 × 16	15
2.2	2R2	6.3 × 13	15	8 × 13	16	8 × 16	17	8 × 20	19	10 × 17	21	10 × 21	23
3.3	3R3	8 × 13	21	8 × 16	26	8 × 21	31	8 × 21	33	10 × 17	34	10 × 21	36
4.7	4R7	8 × 16	31	10 × 17	33	10 × 17	38	10 × 21	44	10 × 26	45	10 × 26	46
10	100	10 × 17	60	10 × 21	66	10 × 21	72	13 × 22	72	13 × 22	80	13 × 27	82
22	220	10 × 21	121	13 × 22	121	13 × 27	126	13 × 27	132	16 × 33	137	16 × 36	143
33	330	13 × 22	154	13 × 27	167	16 × 28	178	16 × 33	186	16 × 36	192	16 × 42	201
47	470	13 × 27	198	16 × 33	214	16 × 33	241	16 × 42	253	18 × 42	339	18 × 42	339
100	101	16 × 33	345	16 × 36	368	16 × 42	391	22 × 43	402	25 × 43	424	25 × 52	448
220	221	18 × 42	586	22 × 43	609	22 × 43	632						
330	331	22 × 43	632										

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Lelon:

TEA010M1HBK-0512P TEA010M1HTR-0512P TEA010M2ABK-0512P TEA100M1CBK-0512P TEA100M1EBK-0512P TEA100M1HBK-0512P TEA100M1VBK-0512P TEA100M2ABK-0613P TEA100M2CBK-1017P TEA100M2EBK-1021P TEA100M2WBK-1327P TEA101M1CBK-0614P TEA101M1EBK-0813P TEA101M1JBK-1017P TEA101M1VBK-0816P TEA101M2CBK-1633P TEA101M2EBK-1842P TEA101M2VBK-2042P TEA101M2WBK-2552P TEA102M1CBK-1021P TEA102M1HBK-1633P TEA102M1VBK-1327P TEA103M1CBK-2243P TEA220M1CBK-0512P TEA220M1EBK-0512P TEA220M1HBK-0613P TEA220M2CBK-1021P TEA220M2EBK-1327P TEA220M2VBK-1327P TEA220M2WBK-1636P TEA221M1CBK-0813P TEA221M1EBK-0816P TEA221M1HBK-1021P TEA221M1JBK-1322P TEA221M1VBK-1017P TEA222M1CBK-1322P TEA222M1EBK-1628P TEA222M1VBK-1633P TEA2R2M1HBK-0512P TEA2R2M1JBK-0512P TEA2R2M2ABK-0512P TEA330M1CBK-0512P TEA330M1HBK-0614P TEA330M1VBK-0614P TEA330M2EBK-1628P TEA330M2VBK-1632P TEA330M2WBK-1640P TEA331M1CBK-0816P TEA331M1EBK-1017P TEA331M1HBK-1322P TEA331M1VBK-1021P TEA332M1EBK-1633P TEA332M1HBK-2243P TEA332M1VBK-1637P TEA3R3M1HBK-0513P TEA470M1CBK-0614P TEA470M1EBK-0613P TEA470M1HBK-0813P TEA470M1VBK-0614P TEA470M2ABK-1021P TEA470M2CBK-1327P TEA470M2VBK-1640P TEA470M2WBK-1836P TEA471M1CBK-0816P TEA471M1EBK-1017P TEA471M1JBK-1327P TEA472M1CBK-1633P TEA472M1EBK-1837P TEA4R7M1HBK-0512P TEA6R8M1HBK-0512P TEA100M1HTR-0512P TEA101M1ETR-0813P TEA4R7M1HTR-0512P TEA101M2ABK-1322P TEA471M1VBK-1021P TEA102M1EBK-1322P TEA471M1HBK-1322P TEA332M1CBK-1627P SEA0R1M1HBK-0407P SEA0R22M1HBK-0407P SEA0R33M1HBK-0407P SEA0R47M1HBK-0407P TEA472M1ABK-1628P