TMCE43 Standard Aluminum Electrolytic Capacitor 130℃

Features

130 ℃, 1000 ~ 4000 hours, long life, low impedance.
suitable bulb-shaped fluorescent lamps with electronic ballast circuit power.

◆ Specifications

Items	Characteristics	
Rated Voltage Range	10V～100V. DC	200, 400 V. DC
Operating Temperature	-40℃～130℃	-25℃～130℃
Capacitance Tolerance	±20%(M) (25℃, 100/120Hz)	
Leakage Current	I≤0.01$C_R U_R$ or 3 ((At 25℃ after 2 minutes)	
	C_R: Nominal capacitance (μF); U_R: Rated voltage (V)	
Dissipation Factor tan δ	(25℃, 100/120Hz)	

U_R(V)	10	16	25	35	50	63	100	200	400
tg δ	0.20	0.16	0.14	0.12	0.10	0.09	0.08	0.15	0.20

When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase.

Low Temperature Characteristics (Max. Impedance Ratio)

Impedance ratio at 100Hz or 120Hz shall not exceed the values given in the below table.

U_R(V)	10	16	25	35	50	63	100	200	400
$Z_{-25℃}/Z_{25℃}$	/	/	/	/	/	/	/	3	6
$Z_{-40℃}/Z_{25}$	6	4	3	3	3	3	3	/	/

When nominal capacitance exceeds 1000μF, add 1 to the value above for each 1000μF increase.

Load Life

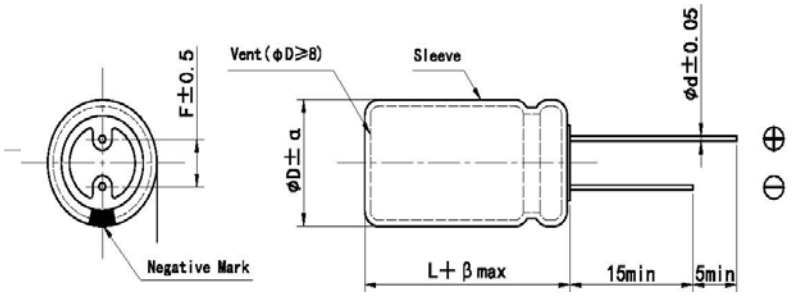
After application of rated voltage with rated ripple current for the 2000hours at +125℃, the capacitors shall meet the following limits.

	10～100WV	200, 400WV
Capacitance	≤ ±30% of the initial	≤ ±20% of the initial
D.F. (tan δ)	≤ 300% of the initial	≤200% of the initial
Leakage	≤ the Initial specified	≤ the Initial specified

Diameter	Duration (h)	
	10～100WV	200, 400WV
6.3	/	1000
8～10	2000	2000
13 Above	4000	/

Others	Q/RME 140-2010, GB/T 5993-2003

◆ Dimensions



mm

D	6.3	8	10	13	16	18
d	0.5		0.6		0.8	
F	2.5	3.5	5.0		7.5	
α	0.5					
β	1.0	2.0				

Size and Max Ripple Current

Voltage (V)	Capacitance (μF)	Size ΦD×L (mm)	tan δ	Z (mArms, (Ω,25℃, 100KHz)	IR (mArms,130℃, 100KHz)
10	330	8×12	0.20	0.22	360
	470	10×12	0.20	0.15	620
	1000	10×20	0.20	0.073	960
	2200	13×25	0.22	0.040	1430
	3300	16×25	0.24	0.038	1900
	4700	16×30	0.26	0.034	2300
16	330	8×12	0.16	0.22	360
	470	10×12	0.16	0.15	620
	1000	10×20	0.16	0.073	960
	2200	13×25	0.18	0.040	1430
	3300	16×30	0.20	0.034	2300
	4700	16×35	0.22	0.031	2550
25	220	8×12	0.14	0.22	360
	330	10×12	0.14	0.15	620
	470	10×16	0.14	0.10	800
	1000	13×20	0.14	0.055	1100
	2200	16×30	0.16	0.034	2300
	3300	16×35	0.18	0.031	2550
35	100	8×12	0.12	0.22	360
	220	10×12	0.12	0.15	620
	330	10×16	0.12	0.10	800
	470	10×20	0.12	0.073	960
	1000	13×25	0.12	0.040	1430
	2200	16×35	0.14	0.031	2550
	3300	18×35	0.16	0.028	2800

Voltage (V)	Capacitance (μF)	Size ΦD×L (mm)	tan δ	Z (mArms, (Ω,25℃, 100KHz)	IR (mArms,130℃, 100KHz)
50	4.7	8×12	0.10	0.85	100
	10	8×12	0.10	0.60	200
	22	8×12	0.10	0.35	260
	33	8×12	0.10	0.28	300
	47	8×12	0.10	0.28	300
	100	10×12	0.10	0.18	520
	220	10×20	0.10	0.082	890
	330	13×20	0.10	0.065	1000
	470	13×25	0.10	0.051	1200
	1000	16×30	0.10	0.037	2180
	2200	18×40	0.12	0.029	2800
63	33	8×12	0.09	0.40	250
	47	10×12	0.09	0.27	400
	100	10×16	0.09	0.20	450
	220	13×20	0.09	0.10	820
	330	13×25	0.09	0.072	1000
	470	16×25	0.09	0.069	1500
	1000	16×30	0.09	0.056	1850
	1500	18×40	0.09	0.043	2350
100	4.7	8×12	0.08	1.3	100
	10	8×12	0.08	1.0	200
	22	8×12	0.08	0.67	220
	33	10×12	0.08	0.45	260
	47	10×16	0.08	0.33	330
	100	13×20	0.08	0.17	670
	220	16×25	0.08	0.13	1100
	330	16×30	0.08	0.10	1300
	470	18×30	0.08	0.092	1600

◆ Size and Max Ripple Current

Voltage (V)	Capacitance (μF)	Size ΦD×L (mm)	tan δ	IR (mArms,130℃, 100KHz)
200	4.7	6.3×11	0.15	100
	4.7	8×12	0.15	120

	5.6	8×12	0.15	130
	5.6	8×16	0.15	180
	6.8	8×12	0.15	130
	6.8	8×16	0.15	180
	10	8×16	0.15	200
	10	8×20	0.15	240
	15	8×16	0.15	200
	15	8×20	0.15	240
	22	8×20	0.15	240
	22	10×16	0.15	240
	33	10×20	0.15	320
400	1	6.3×11	0.20	60
	1	8×12	0.20	65
	1.5	8×12	0.20	75
	1.5	8×16	0.20	80
	1.8	8×12	0.20	75
	1.8	8×16	0.20	85
	2.2	8×12	0.20	75
	2.2	8×16	0.20	90
	2.2	8×20	0.20	110
	2.7	8×16	0.20	95
	2.7	8×20	0.20	115
	3.3	8×16	0.20	100
	3.3	8×20	0.20	120
	4.7	8×20	0.20	120
	4.7	10×16	0.20	125
	5.6	10×16	0.20	130
	5.6	10×20	0.20	145
	6.8	10×20	0.20	150

Ripple Current Multiplier

Frequency Coefficient

10V～100V:

Frequency （Hz）	50/60	100/120	1K	10K	100K
4.7μF	0.35	0.42	0.60	0.80	1.00
10μF～330μF	0.45	0.55	0.75	0.90	1.00
47μF～330μF	0.60	0.70	0.85	0.95	1.00
470μF～1500μF	0.65	0.75	0.90	0.98	1.00
2200μF～4700μF	0.75	0.80	0.95	1.00	1.00

200WV，400WV

Frequency （Hz）	100/120	1K	10K	100K
4.7μF	0.42	0.60	0.80	1.00
10μF～330μF	0.55	0.75	0.90	1.00
47μF～330μF	0.70	0.85	0.95	1.00