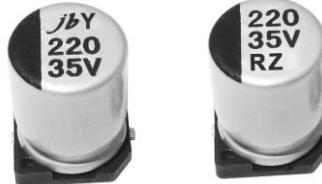


## FEATURES

- Endurance : 105°C 2000H
- High rated ripple current, Extra Low Impedance
- Designed for reflow soldering
- Designed for surface mounting on high-density PCB



## SPECIFICATIONS

Operating Temperature  $-55^{\circ}\text{C} \sim +105^{\circ}\text{C}$

Voltage Range 6.3V ~ 50V.DC

Capacitance Range 33 ~ 2200 $\mu\text{F}$

Capacitance Tolerance  $\pm 20\%$  at 120Hz, 20°C

Leakage Current  $I \leq 0.01 \text{ CV or } 3\mu\text{A}$  whichever is greater  
 $\mu\text{A}/\text{after 2minutes (max)}$

Dissipation Factor (Tan  $\delta$ )

Measurement Frequency: 120Hz, Temperature: 20°C

Rated Voltage (V)	6.3	10	16	25	35	50
Surge voltage (V)	7.3	11.5	18.4	28.8	40.3	57.5
Tan $\delta$ (Max.)	0.32	0.21	0.18	0.14	0.12	0.10

Stability At Low Temp.

Measurement Frequency: 120Hz, +20°C

Rated Voltage (V)	6.3	10	16	25	35	50
Impedance Ratio	-25°C	4	3	2	2	2
ZT/Z 20°C (Max.)	-55°C	8	5	4	3	3

Load Life

After applying rated working voltage for 2000H at  $+105^{\circ}\text{C} \pm 2^{\circ}\text{C}$ , and then being stabilized at  $+20^{\circ}\text{C}$ , capacitors shall meet the following limits.

Capacitance Change	Within $\pm 30\%$ of initial value
Dissipation Factor	Less than 300% of the initial value
Leakage Current	Within the initial limit

Shelf life

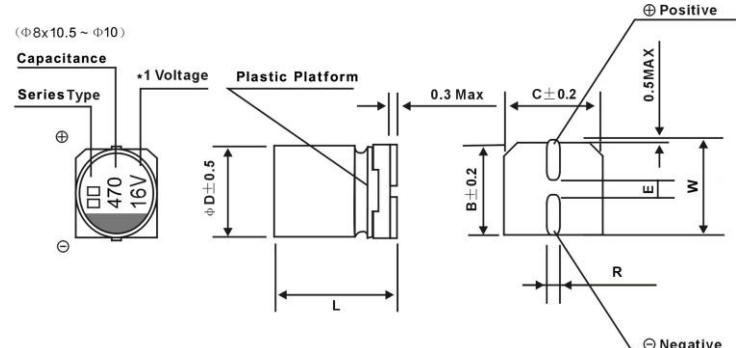
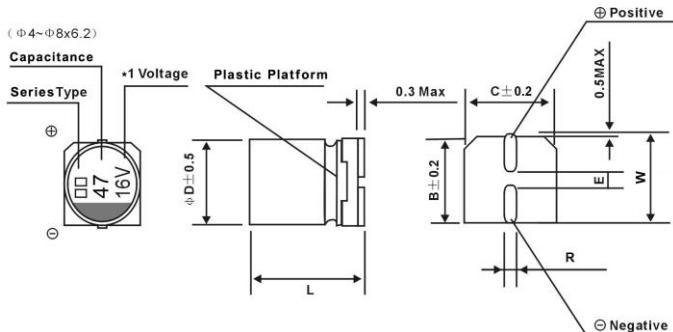
After storage for 1000h at  $+105^{\circ}\text{C} \pm 2^{\circ}\text{C}$  with no voltage applied and then being stabilized at  $+20^{\circ}\text{C}$ , Capacitors shall meet the limits specified in endurance.

Resistance to Soldering Heat

After reflow soldering and then being stabilized at  $+20^{\circ}\text{C}$ , capacitors shall meet the following limits.

Capacitance Change	Within $\pm 10\%$ of the initial value
Dissipation Factor	Within the initial limit
Leakage Current	Within the initial limit

## DRAWING (Unit: mm)



\*1 Voltage mark for 6.3V is [6V] or [6.3V]

\*2 Surface Marking Types: jbY, RZ

ΦDxL	6.3x5.8	6.3x7.7	8x6.5	8x10.5	10x10.5	10x13.5
B	6.6	6.6	8.3	8.3	10.3	10.3
C	6.6	6.6	8.3	8.3	10.3	10.3
E ± 0.2	2.2	2.2	3.1	3.1	4.4	4.4
L	5.8 ± 0.6	7.7 ± 0.6	6.5 ± 0.6	10.5 ± 0.6	10.5 ± 0.6	13.5 ± 1.0
R	0.5 to 0.8	0.5 to 0.8	0.7 to 1.2	0.7 to 1.2	0.7 to 1.2	0.7 to 1.2
W	7.3	7.3	9.2	9.2	11.2	11.2

Please visit our website to get more update data, those data & specification are subject to change without notice.

**REQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT**

Frequency	50Hz	120Hz	1kHz	10kHz≤
Capacitance: C(μF)	0.60	0.70	0.85	1.00

**STANDARD SIZE**

WV/V		6.3			10			16		
Cap/uF		0J			1A			1C		
47	470							6.3x5.8	0.36	300
68	680							6.3x5.8	0.36	300
100	101	6.3x5.8	0.36	300				6.3x5.8 (6.3x7.7)	0.36 (0.26)	300 (600)
150	151				6.3x5.8	0.36	300	6.3x7.7	0.26	600
220	221	6.3x5.8	0.36	300	6.3x7.7 (8x6.5)	0.16 (0.26)	600 (500)	6.3x7.7 (8x6.5)	0.26 (0.26)	600 (500)
330	331	6.3x7.7 (8x6.5)	0.26 (0.26)	600 (500)	8x10.5	0.14	850	8x10.5	0.14	850
470	471	8x10.5	0.14	850	8x10.5	0.14	850	8x10.5	0.14	850
680	681	8x10.5	0.14	850	8x10.5	0.14	850	10x10.5	0.08	1190
820	821							10x10.5	0.08	1190
1000	102				10x10.5	0.08	1190	10x10.5	0.08	1190
1500	152	10x10.5	0.08	1190	10x13.5	0.08	1190	Case size: ΦDxL(mm)	ESR (Ω) max at 100kHz, 20°C	Rated ripple current mArms (100kHz,105°C)
2200	222	10x13.5	0.08	1190						

WV/V		25			35			50		
Cap/uF		1E			1V			1H		
33	330	6.3x5.8	0.36	300	6.3x5.8	0.36	300			
47	470	6.3x5.8	0.36	300	6.3x5.8	0.36	300			
68	680	6.3x5.8	0.36	300	6.3x7.7	0.26	600			
100	101	6.3x7.7 (8x6.5)	0.26 (0.26)	600 (500)	6.3x7.7 (8x10.5)	0.26 (0.14)	600 (850)	8x10.5	0.24	670
150	151	8x10.5	0.14	850	8x10.5	0.14	850			
220	221	8x10.5	0.14	850				10x10.5	0.14	900
330	331				10x10.5	0.08	1190			
390	391				10x10.5	0.08	1190			
470	471	10x10.5	0.08	1190				Case size: ΦDxL(mm)	ESR (Ω) max at 100kHz, 20°C	Rated ripple current mArms (100kHz,105°C)
560	561	10x10.5	0.08	1190						

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