

SK Snap-in terminal Type, Standard Series

- ◆ Applicable Standard
Characteristic W of JIS C 5141
- ◆ Operating Temperature Range
-40°C ~ +105°C
- ◆ Rated Working Voltage
6.3~450 V.DC

- ◆ Rated Voltage and Surge Voltage

Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
Surge Voltage (V)	8	13	20	32	44	63	79	125	200	250	300	400	450	500

- ◆ DC Leakage Current

Applying the rated DC voltage to the capacitor. The leakage current is measured at 5 minutes after the DC voltage across the capacitor reached the rated voltage.

The leakage current shall not exceed the value below. (at 25°C)

$$I \leq 3\sqrt{CV} \mu A, \text{ whichever is greater Where,}$$

I: Leakage Current (μA) C: Nominal Capacitance (μF)

V: Rated Voltage (V)

- ◆ Capacitance Tolerance

The capacitance shall be within the following tolerance to the nominal capacitance.

-20% ~ +20% (At 25°C, 120Hz)

- ◆ Tangent of Loss Angle (Tan δ)

Tan δ shall not exceed the value below. (At 25°C, 120Hz)

When nominal capacitance is over 1000 μF . Tan δ shall be added 0.01 to the listed value with increase of every 1000 μF .

Rated Voltage (V)	6.3,10	16	25,35	50,63	80,100	160,400	450
Tan δ	0.5	0.40	0.35	0.30	0.25	0.15	0.20

◆ Load Life

The following specifications shall be satisfied when the capacitors are restored to 25°C after the rated voltage is applied for 2000 hours at 105°C.

Capacitance Change	±20% of the initial measured value.
Tan δ	≤200% of the initial specified value.
Leakage Current	≤ The initial specified value.

◆ Shelf Life

The following specifications shall be satisfied when the capacitors are restored to 25°C after exposing them for 500 hours at 105°C without voltage applied.

The capacitors shall be subjected to voltage treatment specified in item 4.4 of JIS C 5102, before the measurements.

Capacitance Change	±20% of the initial measured value.
Tan δ	≤200% of the initial specified value.
Leakage Current	≤ The initial specified value.

◆ Solder ability

The lead wires shall be dipped into Methanol (JIS K 1501) or Isopropyl Alcohol (JIS K 1522 or JIS K 8839) solution of 10 ±20% Rosin (JIS K 5902) for 2 ±0.5 seconds, and then dipped into solder H63A (JIS Z 3282) at 235 ±5°C for 2 ±0.5 seconds.

The depth of immersion shall be 2 to 2.5 mm of the capacitor body.

After immersion, the solder shall cover at least 3/4 of the lead wire surface immersed.

◆ Lead Strength

Pull Strength

The lead wire shall not get loose or cut off, while a parallel force is gradually applied to the lead wire up to 10N and retained for 10 second.

Bending Strength

Apply the 0.5Kg weight to the end of the lead wire, and lean the capacitors body 90° and return to the original position within approximately 5 seconds.

Then, repeat this cycle in the posited direction at the same speed.

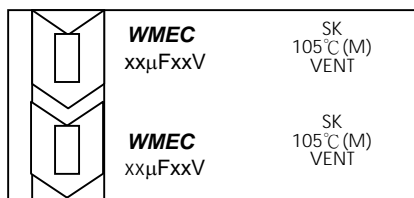
After that, the lead wire shall not loose or cut off.

◆ Marking

Color Style: white marking on black sleeve.

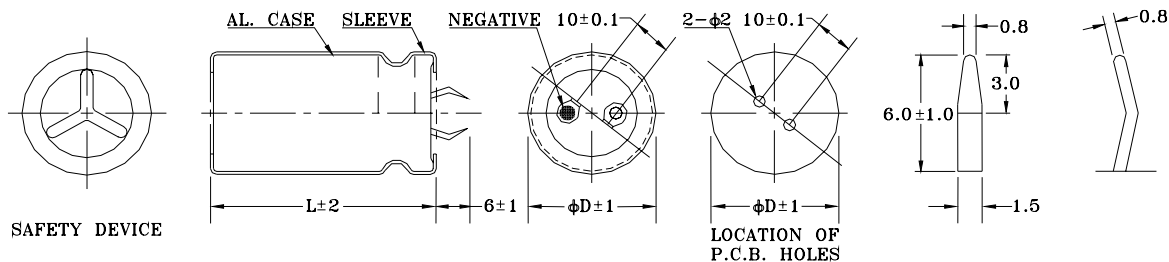
The following items shall be marked on each capacitor.

Example:



- (1) Series Name
- (2) Maximum Operating Temperature
- (3) Capacitance Tolerance
- (4) Polarity
- (5) Wanming Electronics Co., Ltd. Marking
- (6) Nominal Capacitance
- (7) Rated Voltage

◆ Dimensions (mm)



◆ Case Size & Permissible Max. Ripple Current Case Size

Max. Ripple Current : mA (rms) (105°C,120Hz)

wv ΦD μF	6.3								10							
	22		25		30		35		22		25		30		35	
	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C
6800										22x25	2.66					
10000	22x25	2.92								22x30	3.31	25x25	3.41			
15000	22x35	3.83	25x30	3.97	30x25	4.07			22x40	4.56	25x30	4.42	30x25	4.29		
22000			25x40	4.99	30x30	4.89	35x25	4.99			25x40	5.23	30x35	5.40	35x30	5.53
33000			25x50	6.10	30x40	6.05	35x30	5.91					30x45	6.57	35x35	6.46
47000					30x50	7.14	35x40	7.06								

wv ΦD μF	16								25							
	22		25		30		35		22		25		30		35	
	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C
3300										22x25	2.10					
4700	22x25	2.47								22x30	2.63	25x25	2.71			
6800	22x30	3.06	25x25	3.15						22x35	3.24	25x30	3.36	30x25	3.44	
10000	22x35	3.76	25x30	3.89	30x25	3.99			22x45	4.44	25x40	4.32	30x30	4.23	35x25	4.32
15000	22x45	4.74	25x40	4.94	30x30	4.83	35x25	4.94			25x40	5.39	30x40	5.34	35x30	5.22
22000			25x45	5.76	30x40	5.96	35x30	5.82					30x50	6.48	35x40	6.41
33000					30x50	7.13	35x45	7.35								

wv ΦD μF	35								50							
	22		25		30		35		22		25		30		35	
	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C
1500										22x25	2.01					
2200	22x25	1.94								22x30	2.50	25x25	2.58			
3300	22x30	2.48	25x25	2.55						22x35	3.14	25x30	3.26			
4700	22x35	3.06	25x30	3.17	30x25	3.25			22x45	4.02	25x35	3.98	30x25	3.34		
6800	22x45	3.91	25x40	3.87	30x30	3.99	35x25	4.07			25x52	5.20	30x30	4.10	35x25	4.19
10000			25x50	5.10	30x40	5.06	35x30	4.94					35x50	5.16	35x30	5.04
15000					30x50	6.22	35x40	6.15					30x50	6.32	35x40	6.25

wv ΦD μF	63								80							
	22		25		30		35		22		25		30		35	
	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C
1000										22x35	2.17					
1500	22x35	2.01								22x35	2.83	25x30	2.93	30x25	3.00	
2200	22x35	2.65	25x30	2.75	30x25	2.81			22x40	3.42	25x35	3.55	30x30	3.66	35x25	3.74
3300	22x45	3.47	25x40	3.62	30x30	3.54	35x25	3.62			25x45	4.56	30x35	4.50	35x30	4.61
4700			25x45	4.38	30x35	4.32	35x30	4.43					30x45	5.63	35x40	5.80
6800					30x45	5.38	35x40	5.54								
10000					30x60	6.78										

◆ Case Size & Permissible Max. Ripple Current Case Size

Max. Ripple Current: mA (rms) (105°C, 120Hz)

wv ΦD μF	100								160							
	22		25		30		35		22		25		30		35	
	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C
220									22x25	1.09						
330									22x30	1.42	25x25	1.46				
470									22x40	1.89	25x35	1.96	30x25	1.90		
680	22x25	1.79							22x50	2.49	25x45	2.60	30x35	2.56	35x30	2.62
1000	22x35	2.45	25x30	2.53	30x25	2.60							30x45	3.40	35x40	3.50
1500	22x45	3.12	25x35	3.09	30x30	3.18	35x25	3.25							35x50	4.35
2200			25x45	3.91	30x35	3.85	35x30	3.95								
3300					30x45	4.93	35x35	4.85								

wv ΦD μF	200								250							
	22		25		30		35		22		25		30		35	
	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C
220			25x20	0.83					22x30	0.95	25x25	0.95	30x20	0.88		
330	22x30	1.20	25x25	1.21	30x20	1.08			22x40	1.26	25x30	1.20	30x25	1.26	35x20	1.18
390	22x35	1.31							22x45	1.49	25x35	1.49				
470	22x40	1.40	25x30	1.41	30x25	1.50	35x20	1.41	22x50	1.57	25x40	1.57	30x30	1.57	35x25	1.57
560	22x45	1.56	25x35	1.53							25x45	1.79	30x35	1.79	35x30	1.79
680	22x45	1.74	25x40	1.74	30x30	1.74	35x25	1.72			25x50	1.84	30x40	2.00		
820			25x45	1.85												
1000					30x45	2.30	35x35	2.30							35x40	2.30

wv ΦD μF	400								450							
	22		25		30		35		22		25		30		35	
	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C
47	22x23	0.35														
68	22x25	0.51														
100	22x25	0.73							22x30	0.78						
120	22x30	0.78														
150	22x35	1.01	25x30	1.05	30x25	1.08			22x40	1.07	25x30	1.05	30x25	1.08		
220	22x45	1.35	25x35	1.34	30x30	1.38	35x25	1.41	22x50	1.41	25x45	1.48	30x35	1.46	35x25	1.41
470					30x51	2.33	35x35	2.29					30x60	2.61	35x45	2.50

wv ΦD μF	400								450							
	22		25		30		35		22		25		30		35	
	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C	SIZE	R.C
47	22x25	0.50							22x30	0.41						
68	22x30	0.64	25x25	0.66					22x35	0.52	25x30	0.54	30x25	0.55		
82			25x25	0.71												
100	22x40	0.87	25x30	0.86	30x25	0.88			22x45	0.70	25x40	0.73	30x30	0.71	35x25	
150			25x45	1.22	30x35	1.20	35x30	1.23			25x50	0.97	30x40	0.96	35x30	0.73
220					30x40	1.53	35x35	1.57					30x50	1.27	35x40	0.94
330							35x45	2.10								1.25

◆ Frequency Multipliers

Freq.(Hz) W _v	60(50)	120	500	1K	≥ 10K
6.3~100	0.88	1	1.06	1.15	1.20
160~250	0.85	1	1.20	1.25	1.45
315~450	0.88	1	1.15	1.20	1.40

◆ Temperature Multipliers

Freq.(Hz) W _v	40	60	70	85	105
6.3 ~ 450	2.4	2.35	2.17	1.67	1

◆ Packaging Specification

Case size φ D	Carton Box Capacity (pcs)	Carton Box Size		
		L(mm)	H(mm)	W(mm)
22	600	470	310	310
25	500	470	310	310
30	450	470	310	310
35	400	470	310	310

The following s items hall be marked on the box.

WMEC ®		Customer	
Wanming P/N		PO. No.	
Lot No.		Customer P/N	
Final Date		Description	
Inspection		Quantity	PCS.

◆ Other

For other specifications, Characteristic W of JIS C 5141 shall be satisfied.

Aluminum Electrolytic Capacitors may be damaged by corrosion, which is caused by and halogen Ted hydrocarbon solvents.

Please let us know in advance the solvent name and conditions for your P.C.B. cleaning.

We guarantee our products without any prohibited substance about environment.