

WK series

NEW

+105°C, Screw Terminal Type(螺钉型), Standard(标准品)

◆ FEATURES

- Highly reliable capacitors that with stand under high ripple current
- Two or three dimensions with same ratings
- Aluminum case designed explosion-proof vent.
- Best for switching power supplies

◆ SPECIFICATIONS

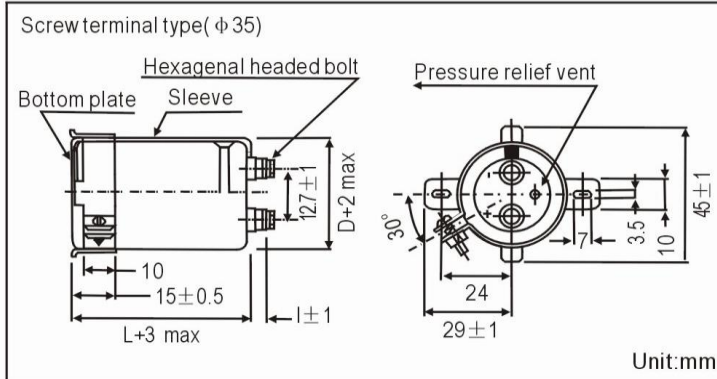
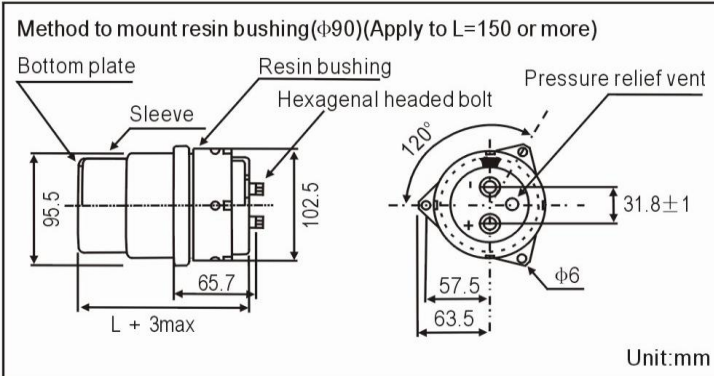
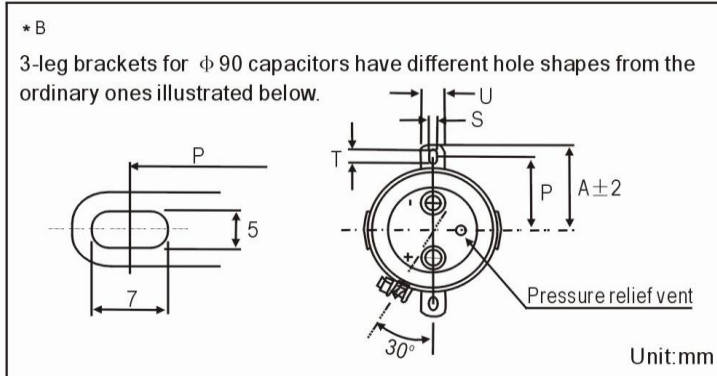
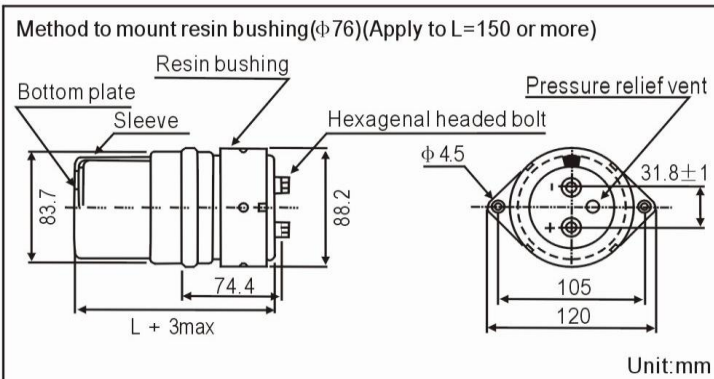
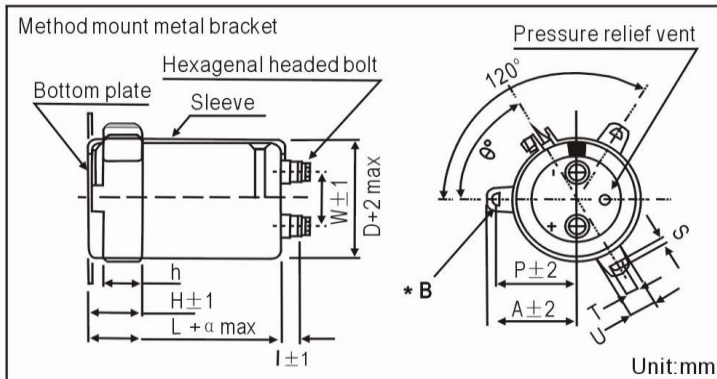
Items	Characteristics		
Category Temperature Range	-40°C~+105°C	-25°C~+105°C	
Rated Voltage Range	10~100V.DC	160-500 V.DC	
Nominal Capacitance Range	180~680000μ F		
Capacitance Tolerance	±20%(120Hz,+20°C)		
Leakage Current(MAX)	I=0.02CV or 5(mA) after 5 minutes application of rated working voltage at 20°C, which is smaller		
Dissipation Factor(MAX) Tanδ (20°C,120Hz)	The values shown is the STANDARD RATINGS tables		
Load Life	After applying rated voltage with max ripple current for 2000hrs at 105°C, the capacitors shall meet the following requirements		
	Capacitance Change	Within ±20% of the initial value	
	Dissipation Factor	Not more than 200% of the specified value	
	Leakage Current	Not more than the specified value	
Shelf Life	After Leaving capacitors under no load at 105°C for 1000hrs, they meet the characteristic requirements listed at right		
	Capacitance change	Within ±20% of the initial value	
	Tanδ	≤200% of initial specified value	
	Leakage current	Initial specified value or less	
Low Temperature Stability Impedance Rate(MAX)	Rated Voltage(V)	10~100	160~500
	Z-25°C/Z+20°C	5	8
	Z-40°C/Z+20°C	12	---
Other	JISC-5141 EIAJ RC-2372		

◆ RIPPLE CURRENT MULTIPLIER

WV	Size(mm)	50 kHz	120 Hz	300 Hz	1 kHz	10 kHz	50 kHz
10 to 50	Φ35 to Φ90	0.95	1	1.03	1.05	1.09	1.12
63 to 80	Φ35	0.90	1	1.06	1.10	1.18	1.22
	Φ51 to Φ90	0.95	1	1.03	1.05	1.09	1.12
100	Φ35	0.82	1	1.12	1.22	1.30	1.33
	Φ51	0.90	1	1.06	1.10	1.18	1.22
	Φ63.5 to Φ90	0.95	1	1.03	1.05	1.09	1.12
160 to 250	Φ35	0.80	1	1.19	1.34	1.46	1.52
	Φ51&Φ63.5	0.81	1	1.14	1.26	1.36	1.41
	Φ76&Φ90	0.82	1	1.12	1.22	1.30	1.33
350 to 500	Φ35 to Φ90	0.80	1	1.19	1.34	1.46	1.52

◆ CASE SIZE TABLE

NEW



Dimension of terminal pitch (W) and (I) and Nominal dia. of bolt

φ D	w	l	α	Nominal dia. of bolt
35	12.7	6	3	M5
51	22.0	6	3	M5
63.5	28.6	6	3	M5
76	31.8	6	3	M5
90	31.8	6	3	M5

◆ Dimension of mounting bracket

Voltage(Code)		3-leg				2-leg				
Symbol	φ D	51	63.5	76	90	35	51	63.5	76	90
P		32.5	38.1	44.5	50.8	24	33.2	40.5	46.5	53
A		38.5	43	49.2	58.5	29	40	46.5	53	59
T		7.5	8.0	7.0	8.0	6.0	6.0	7.0	6.0	6.0
S		5.0	5.0	5.0	5.0	3.5	4.5	4.5	4.5	4.5
U		12	14	14	18	10	14	14	14	14
θ °		60	60	60	60	30	30	30	30	30
H		20	25	30	35	15	25	35	35	35
h		15	20	24	25	10	15	20	20	20

◆ STANDARD RATINGS

NEW

Voltage(Code)		10V(1A)			16V(1C)			25V(1E)		
SV		13			20			32		
Cap(μ F)	Code	Case Size	Tan δ	Ripple Current	Case Size	Tan δ	Ripple Current	Case Size	Tan δ	Ripple Current
12000	129							35×50	0.35	5.9
15000	159							35×50	0.35	6.9
18000	189				35×50	0.40	6.0	35×60	0.35	7.7
22000	229				35×50	0.40	7.0	35×60	0.35	8.4
27000	279	35×50	0.45	7.1	35×60	0.40	8.0	35×80	0.35	10.2
33000	339	35×50	0.45	7.1	35×60	0.45	8.5	35×80	0.40	11.1
39000	399	35×60	0.50	8.6	35×80	0.45	9.9	35×100	0.40	12.5
47000	479	35×80	0.50	10.3	35×80	0.50	11.3	35×120	0.40	14.9
56000	569	35×80	0.60	10.3	35×100	0.50	12.2	51×80	0.45	12.1
68000	689	35×100	0.60	12.3	35×100	0.55	14.3	51×100	0.45	15.7
82000	829	35×100	0.65	12.9	51×80	0.55	12.3	51×100	0.50	15.7
100000	10T	35×120	0.65	15.5	51×80	0.65	12.3	51×120	0.50	18.5
120000	12T	51×80	0.75	14.3	51×100	0.65	15.1	63.5×100	0.65	18.6
150000	15T	51×100	0.80	16.5	51×120	0.70	17.6	63.5×120	0.65	22.4
180000	18T	51×120	0.80	19.6	51×120	0.80	18.1	63.5×120	0.80	22.4
220000	22T	51×120	0.85	21.0	63.5×120	0.85	24.0	76×120	0.85	26.6
270000	27T	63.5×120	1.00	24.5	63.5×120	1.00	24.5	76×120	1.00	27.1
330000	33T	63.5×120	1.20	24.6	76×120	1.30	26.4	76×140	1.20	31.0
390000	39T	76×120	1.50	26.6	76×120	1.50	26.6	90×140	1.50	31.1
470000	47T	76×120	1.80	26.8	76×140	1.60	32.3			
560000	56T	76×140	2.00	29.5	90×140	2.00	35.1			
680000	68T	90×140	2.40	32.5	90×140	2.40	38.3			

Case size Φ D×L(mm)

Ripple Current (Arms) at 105℃ 120Hz

Tan δ at 20℃ 120Hz

◆ STANDARD RATINGS

NEW

Voltage(Code)		35V(1V)			50V(1H)			63V(1J)		
SV		44			63			79		
Cap(μ F)	Code	Case Size	Tan δ	Ripple Current	Case Size	Tan δ	Ripple Current	Case Size	Tan δ	Ripple Current
2700	278							35×50	0.20	4.1
3300	338							35×50	0.20	5.5
3900	398				35×50	0.20	4.1	35×50	0.20	5.6
4700	478				35×50	0.20	4.5	35×50	0.20	5.6
5600	568				35×50	0.20	4.8	35×60	0.20	6.3
6800	688				35×50	0.25	4.8	35×60	0.20	6.6
8200	828	35×50	0.30	4.8	35×60	0.25	5.5	35×80	0.20	8.9
10000	109	35×50	0.30	5.2	35×80	0.25	6.7	35×80	0.25	8.9
12000	129	35×60	0.30	6.1	35×80	0.25	7.4	35×100	0.25	9.9
15000	159	35×60	0.30	6.8	35×80	0.25	8.3	35×120	0.25	11.9
18000	189	35×80	0.30	8.3	35×80	0.25	9.7	35×120	0.25	13.3
22000	229	35×80	0.30	9.1	35×100	0.25	11.7	51×80	0.25	14.7
27000	279	35×100	0.30	10.9	51×80	0.25	13.2	51×100	0.25	17.4
33000	339	35×120	0.30	13.1	51×100	0.25	16.1	51×120	0.25	19.2
39000	399	51×80	0.35	11.5	51×120	0.25	16.4	63.5×100	0.30	20.0
47000	479	51×100	0.35	14.0	51×120	0.30	17.4	63.5×120	0.30	23.8
56000	569	51×100	0.40	14.3	63.5×100	0.35	17.4	63.5×120	0.30	26.1
68000	689	51×120	0.40	17.0	63.5×120	0.35	20.8	76×120	0.35	29.4
82000	829	63.5×100	0.45	18.5	76×120	0.40	23.6	76×140	0.40	32.0
100000	10T	63.5×120	0.45	22.0	76×120	0.45	24.4	76×140	0.50	32.0
120000	12T	63.5×120	0.55	22.0	76×120	0.55	24.4	90×140	0.60	34.9
150000	15T	76×120	0.65	24.8	90×140	0.60	29.8			
180000	18T	76×120	0.80	24.8	76×140	0.75	29.9			
220000	22T	76×120	0.80	29.3						
270000	27T	90×120	1.00	31.9						

Case size Φ D×L(mm)

Ripple Current (Arms) at 105°C 120Hz

Tan δ at 20°C 120Hz

◆ STANDARD RATINGS

NEW

Voltage(Code)		80V(1K)			100V(2A)			160V(2C)		
SV		100			125			200		
Cap(μ F)	Code	Case Size	Tan δ	Ripple Current	Case Size	Tan δ	Ripple Current	Case Size	Tan δ	Ripple Current
560	567							35×50	0.15	2.0
680	687							35×50	0.15	2.2
820	827							35×50	0.15	2.4
1000	108							35×50	0.15	2.7
1200	128							35×60	0.15	3.2
1500	158							35×60	0.15	3.6
1800	188				35×50	0.10	4.1	35×80	0.15	4.3
2200	228	35×50	0.15	4.3	35×50	0.10	4.5	35×80	0.15	4.8
2700	278	35×50	0.15	4.9	35×60	0.10	5.3	35×100	0.15	5.6
3300	338	35×50	0.15	5.4	35×80	0.10	6.4	35×120	0.15	6.5
3900	398	35×60	0.15	6.1	35×80	0.12	6.3	51×80	0.20	6.5
4700	478	35×60	0.15	6.7	35×100	0.12	8.1	51×100	0.20	7.8
5600	568	35×80	0.15	8.1	35×100	0.12	8.1	51×100	0.20	8.7
6800	688	35×80	0.15	8.8	35×120	0.15	8.7	51×120	0.20	10.4
8200	828	35×100	0.20	9.2	51×80	0.15	9.6	63.5×100	0.20	10.5
10000	109	35×120	0.20	11.0	51×100	0.15	10.9	63.5×120	0.20	12.6
12000	129	51×80	0.20	12.1	51×120	0.15	14.0	76×100	0.20	14.1
15000	159	51×100	0.20	14.9	51×120	0.15	15.6	76×120	0.20	17.1
18000	189	51×120	0.20	17.8	63.5×100	0.20	15.6	76×140	0.20	20.1
22000	229	51×120	0.20	19.8	63.5×120	0.20	16.3	90×140	0.25	21.8
27000	279	63.5×100	0.25	20.5	76×120	0.25	17.8	90×140	0.25	24.0
33000	339	76×100	0.25	25.0	76×120	0.25	19.8			
39000	399	76×100	0.30	25.0	76×140	0.30	20.9			
47000	479	76×120	0.30	26.4	90×140	0.30	25.1			
56000	569	76×120	0.30	27.2	90×140	0.30	27.4			
68000	689	76×140	0.35	29.6						
82000	829	90×140	0.40	33.2						

Case size Φ D×L(mm);

Ripple Current (Arms) at 105℃ 120Hz;

Tan δ at 20℃ 120Hz

◆ STANDARD RATINGS

NEW

Voltage(Code)		200V(2D)			250V(2E)			315V(2F)		
SV		250			300			365		
Cap(μ F)	Code	Case Size	Tanδ	Ripple Current	Case Size	Tanδ	Ripple Current	Case Size	Tanδ	Ripple Current
180	187							35×50	0.10	1.6
220	227							35×50	0.10	1.8
270	277				35×50	0.15	1.8	35×50	0.10	2.0
330	337	35×50	0.15	1.7	35×50	0.15	2.0	35×50	0.10	2.2
390	397	35×50	0.15	1.9	35×50	0.15	2.2	35×50	0.10	2.4
470	477	35×50	0.15	2.1	35×50	0.15	2.5	35×60	0.10	2.5
560	567	35×50	0.15	2.3	35×50	0.15	2.6	35×60	0.10	2.7
680	687	35×50	0.15	2.9	35×60	0.15	3.2	35×80	0.10	3.1
820	827	35×50	0.15	2.8	35×80	0.15	3.5	35×80	0.15	3.1
1000	108	35×60	0.15	3.4	35×80	0.15	4.2	35×100	0.15	3.6
1200	128	35×60	0.15	3.6	35×80	0.20	4.0	35×120	0.15	4.3
1500	158	35×80	0.15	4.4	35×100	0.20	4.6	51×80	0.15	4.9
1800	188	35×80	0.15	4.8	35×120	0.20	5.5	51×100	0.15	5.9
2200	228	35×100	0.15	5.7	51×80	0.20	6.4	51×110	0.15	6.9
2700	278	35×120	0.15	6.8	51×100	0.20	8.4	51×120	0.15	7.9
3300	338	51×80	0.15	7.8	51×120	0.20	10.1	63.5×100	0.15	9.2
3900	398	51×100	0.15	9.3	51×120	0.20	11.0	63.5×120	0.15	10.8
4700	478	63.5×100	0.20	10.1	63.5×120	0.20	12.5	76×100	0.15	12.2
5600	568	63.5×100	0.20	11.0	63.5×120	0.20	12.6	76×120	0.15	12.8
6800	688	63.5×120	0.20	13.1	76×120	0.20	15.4	76×130	0.15	14.7
8200	828	63.5×120	0.20	14.4	76×120	0.20	16.8	90×140	0.15	18.2
10000	109	76×120	0.20	17.7	76×140	0.20	17.0	90×140	0.15	20.2
12000	129	76×120	0.20	19.4	90×140	0.20	20.2			
15000	159	76×140	0.20	23.2						
18000	189	90×140	0.25	24.9						

Case sizeΦD×L(mm)

Ripple Current (Arms) at 105℃ 120Hz

Tanδ at 20℃ 120Hz

◆ STANDARD RATINGS

NEW

Voltage(Code)		350V(2V)			400V(2G)			450V(2W)		
SV		400			450			500		
Cap(μ F)	Code	Case Size	Tan δ	Ripple Current	Case Size	Tan δ	Ripple Current	Case Size	Tan δ	Ripple Current
180	187	35×50	0.10	1.6	35×50	0.10	1.8			
220	227	35×50	0.10	1.8	35×50	0.10	2.0	35×80	0.15	2.5
270	277	35×50	0.10	2.0	35×50	0.10	2.3			
330	337	35×50	0.10	2.2	35×60	0.10	2.8	35×100	0.15	2.8
390	397	35×60	0.10	2.6	35×60	0.10	3.0			
470	477	35×60	0.10	2.8	35×80	0.10	3.2	51×80	0.15	4.1
560	567	35×80	0.10	3.2	35×80	0.15	3.2			
680	687	35×80	0.15	3.2	35×100	0.15	3.9	51×90	0.15	5.1
820	827	35×100	0.15	3.6	35×120	0.15	4.6			
1000	108	35×120	0.15	4.4	51×80	0.15	5.1	51×90	0.15	7.45
1200	128	51×80	0.15	5.3	51×90	0.15	5.9			
1500	158	51×90	0.15	6.5	51×120	0.15	7.6	51×120	0.15	8.1
1800	188	51×110	0.15	6.9						
2200	228	51×110	0.15	7.7	63.5×90	0.15	9.3	63.5×110	0.15	10.3
2700	278	63.5×90	0.15	9.7				76×100	0.15	10.4
3300	338				63.5×120	0.15	11.0	76×100	0.15	10.9
3900	398	76×90	0.15	11.9						
4700	478				76×120	0.15	14.7	76×130	0.15	14.7
5600	568	76×130	0.15	16.6	76×140	0.15	15.0	76×150	0.15	17.2
6800	688	76×140	0.15	19.0	90×130	0.15	18.1	90×150	0.15	19.2
8200	828	90×140	0.15	20.5				90×190	0.15	23.4
10000	109							90×200	0.15	24.1
12000	129							90×230	0.15	28.3
15000	159							90×250	0.15	32.8

Case size ϕ D×L(mm)

Ripple Current (Arms) at 105°C 120Hz

Tan δ at 20°C 120Hz

◆ STANDARD RATINGS

NEW

Voltage(Code)		500V(2H)								
SV		600								
Cap(μ F)	Code	Case Size	Tan δ	Ripple Current						
330	337	51×80	0.15	2.4						
470	477	51×80	0.15	2.9						
680	687	51×100	0.15	3.8						
1000	108	51×110	0.15	4.6						
1500	158	63.5×110	0.15	6.2						
2200	228	63.5×130	0.15	8.1						
2700	278	63.5×150	0.15	8.4						
		76×110	0.15	7.8						
3300	338	63.5×170	0.15	9.9						
		76×150	0.15	9.9						
3900	398	76×150	0.15	10.6						
4700	478	76×190	0.15	13.1						
		90×150	0.15	12.4						
5600	568	90×150	0.15	13.5						
6800	688	90×170	0.15	15.8						
8200	828	90×220	0.15	19.4						
10000	109	90×250	0.15	22.8						

Case size Φ D×L(mm)

Ripple Current (Arms) at 105°C 120Hz

Tan δ at 20°C 120Hz