

Snap-In Terminal Aluminum Electrolytic Capacitor 105°C

SPKE16(105°C) Series

- Highly reliable capacitors that with high ripple current.
- Two or three dimensions with same ratings.
- Terminal spacing fixed at 10 mm for printed circuit board plug in.
- Aluminum case designed explosion-proof vent
- Best for switching power supplies.
- For the special designing requirement, please contact us.

Specifications

Item	Performance Characteristics												
Operating Temperature Range	-40 to +105°C	-25 to +105°C											
Rated Voltage Range	10 to 100VDC	160 to 500VDC											
Capacitance Range	330 to 68000uF	33 to 2200uF											
Capacitance Tolerance	±20%(120Hz,+20°C)												
Leakage Current (+20°C,max)	I ≤ 0.02 CV After 5 minutes,with rated working voltage applied.												
Dissipation Factor(tan δ)	Less than value under table (%) (+20°C,at 120Hz)	Uf \ WVDC	10~16	25~35	50~63	80~100	160~250	315~500					
		47~390				15	15	20					
		470~3900	25	20	20	20	15	20					
		4700~8200	35	30	30	25							
		10000~22000	40	35	30								
		27000~47000	45	40	35								
		57000~68000	50	45									
Low Temperature Characteristics (120Hz)	impedance ratio max.	Rated voltage(v)	10	16	25	35	50	63	100	160	200	250	400~500
		Z-25°C/+20°C	5	5	4	4	4	4	4	4	4	4	8
		Z-40°C/+20°C	15	12	15	12	12	12					
Load Life	Test conditions												
	Duration time	: 2000Hrs											
	Ambient temperature	: +105°C											
	Applied voltage	: Rated DC working voltage											
	After test requirements at +20°C												
	Capacitance change	: ≤ ±20% of the initial measured value											
	Dissipation factor	: ≤ 200% of the initial specified value											
Leakage current	: ≤ The initial specified value												
Shelf Life	Test conditions												
	Duration time	: 1000Hrs											
	Ambient temperature	: +105°C											
	Applied voltage	: None											
	After test requirements at +20	: Same limits as Load life											
	Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes												

Multiplier for Ripple Current vs.Frequency

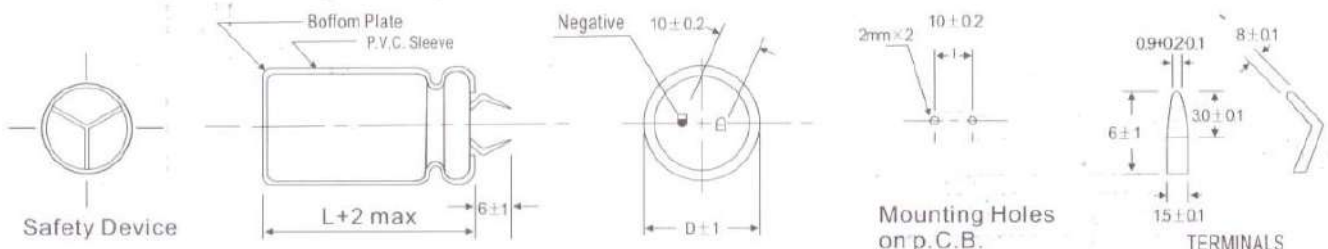
CAP(uF) \ Frequency(Hz)	50(60)	120	400	1k	10k	50k~100k
10<CAP≤100	0.8	1	1.23	1.36	1.48	1.53
100<CAP≤1000	0.8	1	1.16	1.25	1.35	1.38
100<CAP	0.8	1	1.11	1.17	1.25	1.28

Multiplier for Ripple Current vs.Temperature

Temperature(°C)	45	60	85	95	105
Multiplier	2.1	1.9	1.4	1.25	1.00

Diagram of Dimensions:(unit:mm)

SYMBOL G:T.C.B.TERMINAL(SNAP-IN)



Snap-In Terminal Aluminum Electrolytic Capacitor 105°C

Case Size

øD×L(mm)

WV(SV) øD uF	10(13)								16(20)							
	22		25		30		35		22		25		30		35	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
3300									22×26	1.17						
4700	22×26	1.24							22×31	1.53	25×26	1.53				
6800	22×26	1.56	25×26	1.56					22×31	2.02	25×26	2.02	30×26	2.02		
8200	22×26	2.04	25×26	2.04					22×31	2.20						
10000	22×31	2.20	25×26	2.25	30×26	2.20			22×36	2.79	25×31	2.79	30×26	2.79		
12000	22×36	2.34	25×26	2.34					22×36	3.06	25×31	3.06	30×26	3.06		
15000	22×36	2.76	25×31	2.76	30×26	2.76			22×51	3.24	25×41	3.24	30×36	3.24	35×32	3.24
18000	22×36	2.94	25×31	2.94					22×51	3.51	25×46	3.51	30×36	3.51	35×32	3.51
22000	22×41	3.12	25×36	3.12	30×31	3.12	35×27	3.12			25×51	4.08	30×46	4.08	35×32	4.08
27000	22×46	3.48	25×36	3.48	30×31	3.48	35×27	3.48			25×51	4.30	30×41	4.30	35×37	4.30
33000			25×46	3.72	30×36	3.72	35×32	3.72					30×46	4.83	35×37	4.83
39000			25×51	4.10	30×41	4.10	35×32	4.10					30×51	5.78	35×42	5.78
47000					30×46	4.38	35×37	4.38							35×47	6.32
56000					30×51	4.64	35×42	4.64							35×52	7.05
68000							35×52	4.80								

WV(SV) øD uF	25(32)								35(44)							
	22		25		30		35		22		25		30		35	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1500									22×26	1.26						
2200	22×26	1.03							22×31	1.35	25×26	1.35				
3300	22×26	1.48	25×26	1.48					22×31	1.84	25×26	1.84	30×26	1.84		
3900									22×31	2.23						
4700	22×31	1.92	25×26	1.92	30×26	1.92			22×36	2.42	25×31	2.42	30×26	2.24		
5600	22×31	2.25							22×36	2.89	25×31	2.89	30×26	2.89		
6800	22×31	2.60	25×26	2.60	30×26	2.60			22×41	3.24	25×36	3.24	30×31	3.24	35×27	3.24
8200	22×36	3.14	25×31	3.14	30×26	3.14			22×51	3.57	25×41	3.57	30×31	3.57	35×27	3.57
10000	22×41	3.50	25×36	3.50	30×31	3.50	35×27	3.50			25×46	3.96	30×36	3.96	35×32	3.96
12000	22×46	4.02	25×41	4.02	30×31	4.02	35×27	4.02			25×51	4.21	30×41	4.21	35×32	4.21
15000			25×46	4.58	30×36	4.58	35×32	4.58					30×46	4.69	35×37	4.69
18000			25×51	4.82	30×41	4.82	35×37	4.82							35×42	5.07
22000					30×46	5.12	35×37	5.12							35×52	5.50
27000							35×47	5.47								
33000							35×52	6.09								

WV(SV) øD uF	50(63)								63(79)							
	22		25		30		35		22		25		30		35	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
680									22×26	0.70						
1000	22×26	0.84							22×26	0.85	25×26	0.85				
1200									22×26	0.98						
1500	22×31	1.10	25×26	1.10					22×31	1.14	25×26	1.14	30×26	1.10		
1800	22×31	1.54							22×31	1.40	25×26	1.40				
2200	22×31	1.65	25×26	1.65	30×26	1.65			22×36	1.65	25×31	1.65	30×26	1.65		
2700	22×36	1.94	25×31	1.94					22×41	2.07	25×36	2.70	30×26	2.07		
3300	22×36	2.24	25×31	2.24	30×26	2.24			22×51	2.48	25×41	2.48	30×31	2.48	35×27	2.48
3900	22×41	2.54	25×36	2.54	30×31	2.54					25×46	3.05	30×36	3.05	35×32	3.05
4700	22×46	2.95	25×41	2.95	30×31	2.95	35×27	2.95			25×51	3.43	30×41	3.43	35×32	3.43
5600	22×51	3.10	25×46	3.10	30×41	3.10	35×32	3.10					30×46	3.86	35×37	3.86
6800			25×51	3.26	30×41	3.26	35×32	3.26					30×51	4.64	35×42	4.64
8200					30×46	3.58	35×37	3.58							35×47	5.05
10000					30×51	4.11	35×42	4.11							35×52	5.75
12000							35×47	4.62								
15000							35×52	5.05								

Ripple Current (A,rms) at 105°C 120Hz

Snap-In Terminal Aluminum Electrolytic Capacitor 105°C

Case Size

øD×L(mm)

WV(SV) øD uF	80(100)								100(125)								
	22		25		30		35		22		25		30		35		
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	
330										22×26	0.54						
470	22×26	0.63								22×31	0.79	25×26	0.79				
560	22×31	0.7								22×31	0.90	25×26	0.10				
680	22×31	0.84	25×26	0.84						22×31	1.02	25×26	1.02	30×26	1.02		
820	22×31	1.02	25×31	1.00						22×31	1.26	25×26	1.26	30×26	1.15		
1000	22×36	1.16	25×31	1.16	30×26	1.16				22×36	1.38	25×31	1.38	30×26	1.38		
1200	22×36	1.46	25×31	1.46	30×31	1.40				22×41	1.65	25×36	1.65	30×31	1.65		
1500	22×41	1.74	25×36	1.74	30×31	1.74				22×46	1.83	25×41	1.83	30×31	1.83	35×27	1.83
1800	22×46	1.95	25×41	1.95	30×31	1.95	35×27	1.95				25×41	2.52	30×36	2.52	35×32	2.52
2200	22×51	2.25	26×46	2.25	30×36	2.25	35×32	2.25				25×51	3.03	30×41	3.03	35×32	3.03
2700			25×51	2.68	30×41	2.68	35×37	2.68						30×46	4.10	35×37	4.10
3300			25×56	3.30	30×51	3.30	35×42	3.30						30×56	4.59	35×47	4.59
3900					30×51	3.85	35×42	3.85								35×47	4.98
4700					30×51	4.29	35×42	4.29								35×52	5.43
5600							35×47	5.10									
6800							35×52	5.66									

WV(SV) øD uF	160(200)								200(250)								
	22		25		30		35		22		25		30		35		
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	
100										22×26	0.38						
150	22×26	0.37								22×26	0.54	25×26	0.54				
220	22×26	0.42								22×31	0.92	25×26	0.92	30×26	0.92		
270	22×26	0.74								22×31	1.03	25×26	1.03	30×26	1.05		
330	22×31	0.98	25×26	0.98	30×26	0.98				22×36	1.21	25×31	1.21	30×26	1.21		
390	22×36	1.10	25×31	1.10	30×26	1.10				22×41	1.39	25×36	1.39	30×31	1.39		
470	22×36	1.21	25×31	1.21	30×26	1.21				22×46	1.62	25×41	1.62	30×31	1.62	35×26	1.62
560	22×41	1.40	25×36	1.40	30×31	1.40	35×27	1.40		22×51	1.85	25×41	1.85	30×36	1.85	35×27	1.85
680	22×46	1.64	25×41	1.64	30×36	1.64	35×32	1.64		22×56	2.04	25×51	2.04	30×36	2.04	35×32	2.04
820			25×46	1.85	30×36	1.85	35×32	1.85				25×56	2.34	30×41	2.34	35×37	2.34
1000			25×51	2.15	30×41	2.15	35×32	2.15						30×46	2.7	35×42	2.7
1200			25×56	2.46	30×46	2.46	35×37	2.46						30×51	3	35×42	3
1500					30×51	2.80	35×42	2.80								35×52	3.43
1800					30×51	3.13	35×42	3.13								35×52	4.01
2200							35×56	3.39									

WV(SV) øD uF	220(270)								250(300)								
	22		25		30		35		22		25		30		35		
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	
68										22×26	0.27						
100										22×31	0.44	25×26	0.44				
150	22×26	0.50	25×26	0.5						22×31	0.60	25×26	0.60	30×26	0.6		
180	22×26	0.60	25×26	0.60						22×31	0.69	25×26	0.69	30×26	0.69		
220	22×31	0.85	25×26	0.85	30×26	0.85				22×36	1.00	25×31	1.00	30×26	1.00		
270	22×31	1.05	25×26	1.05	30×26	1.05				22×41	1.16	25×36	1.16	30×31	1.16		
330	22×36	1.15	25×31	1.12	30×26	1.15				22×46	1.28	25×36	1.28	30×31	1.28	35×27	1.28
390	22×41	1.25	25×36	1.25	30×31	1.25				22×46	1.48	26×36	1.48	30×31	1.48	35×27	1.48
470	22×46	1.35	25×41	1.35	30×31	1.35	35×27	1.35				25×46	1.76	30×36	1.76	35×32	1.76
560	22×51	1.60	25×46	1.60	30×36	1.60	35×27	1.60				25×51	1.93	30×41	1.93	35×32	1.93
680	22×56	1.60	25×51	1.75	30×41	1.75	35×27	1.75						30×46	2.22	35×37	2.22
820			25×56	2.00	30×46	2.00	35×37	2.00						30×51	2.48	35×42	2.48
1000					30×51	2.40	35×42	2.30								35×47	2.80
1200							35×47	2.30								35×52	3.17
1500							35×52	2.40									
1800							35×56	2.50									

Ripple Current (A,rms) at 105°C 120Hz

Snap-In Terminal Aluminum Electrolytic Capacitor 105°C

Case Size

øD×L(mm)

WV(SV) øD uF	350(400)								400(450)							
	22		25		30		35		22		25		30		35	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
68	22×25	0.56							22×25	0.47						
100	22×30	0.7	25×25	0.7					22×30	0.60						
120	22×35	0.73							22×35	0.65	25×30	0.70	30×25	0.78		
150	22×40	0.79	25×30	0.82	30×25	0.82			22×40	0.70	25×35	0.73				
180	22×45	0.81	25×35	0.89	30×30	0.9			22×50	0.78	25×40	0.82	30×30	0.83	35×25	0.86
220	22×50	0.93	25×40	0.97	35×25	0.98					25×45	0.87	30×35	0.96		
270			25×50	1.01	30×35	1.05	35×30	1.01			25×50	0.94	30×40	0.95	35×30	0.91
330					30×45	1.16	35×35	1.16					30×45	1.11	35×35	1.13
390					30×50	1.26	35×40	1.26					30×50	1.15	35×40	1.26
470							35×45	1.35							35×45	1.31
560							35×50	1.51							35×50	1.50

WV(SV) øD uF	450(500)								500(550)							
	22		25		30		35		22		25		30		35	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
39									22×30	0.35						
47									22×35	0.41						
56	22×25	0.47							22×40	0.47						
68	22×30	0.56	25×25	0.56					22×45	0.54						
82	22×35	0.65									25×40	0.62				
100	22×40	0.70	25×30	0.70	30×25	0.78					25×45	0.67				
120	22×45	0.73	25×35	0.73							25×50	0.77			35×30	0.72
150	22×50	0.78	25×40	0.82	30×30	0.83	35×25	0.86					30×40	0.85		
180			25×45	0.87	30×35	0.86							30×50	1.01		
220			25×50	0.94	30×40	0.95	35×30	0.91							35×45	1.12
270					30×45	1.11	35×35	1.13							35×50	1.29
330					30×50	1.15	35×40	1.26								
390							35×45	1.31								
470							35×50	1.50								

Ripple Current (A,rms) at 105°C 120Hz