

# Screw Terminal Aluminum Electrolytic Capacitor 105°C

## SPKE17(105°C) Series

- Load life of 2000 hours at 105°C
- high ripple current
- Used for computers powers, Hi-ripple circuit of electric vehicle, electric train, general-purpose inverter etc..
- For the special designing requirement, please contact us.



### Specifications

Item	Performance Characteristics
Operating Temperature Range	-25 to +105°C
Rated Voltage Range	160 to 450VDC
Capacitance Range	270 to 39000uF
Capacitance Tolerance	±20%(120Hz,+20°C)
Leakage Current (+20°C,max)	$I \leq 0.02CV$ or 5mA, whichever is smaller.(after 5 minutes)

Dissipation Factor(tanδ)

Rated Voltage(V)	160~250	350~450
tanδ	0.25	0.2

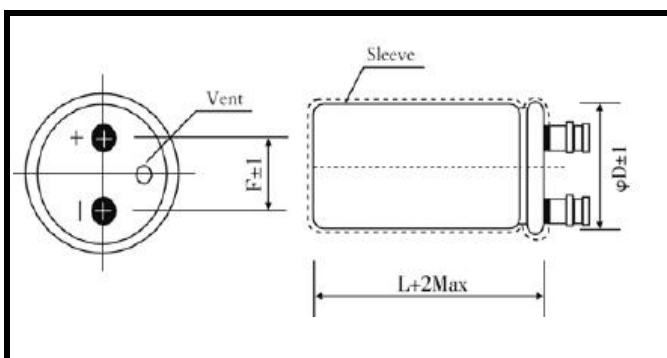
Load Life

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	: 500Hrs
Ambient temperature	: +105°C
Applied voltage	: None
After test requirements at +20°C	: Same limits as Load life
After Test	: Rated voltage to be applied for 60 minutes,24 to 48 hours before measurement

### Diagram of Dimensions:(unit:mm)



Dø	35	50	65	85
F	13	22	28	32

### Multiplier For Ripple Current

#### Frequency coefficient

Frequency(Hz)	50,60	120	300	1K	≥10K
Coefficient	0.7	1	1.1	1.3	1.4

#### Temperature coefficient

Temperature(°C)	+70	+85	+105
Coefficient	2.1	1.7	1.0

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## ■ Case Size

u F	WV	160		200		250		350		400		450	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
270												35x53	3.70
330										35x43	4.1	35x83	4.9
389								35x53	4.5	35x83	5.3	35x83	4.3
470								35x83	5.8	35x83	5.8	35x83	5.6
560								35x83	6.4	35x100	6.4	35x100	6.9
680								35x83	7.0	35x100	7.6	35x100	7.6
820								35x100	8.3	35x100	8.3	50x75	8.6
1000								50x75	9.2	50x75	9.4	50x75	9.4
1200								50x75	10.3	50x75	10.3	50x96	11.4
1500						35x100	8.7	50x96	11.5	50x96	12.7	50x115	13.7
1800						35x100	9.5	50x96	13.9	50x96	13.9	50x130	15.8
2200				35x100	10.6	50x75	10.8	50x130	15.4	50x115	17.4	65x96	17.0
2700				35x121	12.7	50x75	12.0	50x130	19.3	50x130	18.8	65x110	20.2
3300		35x121	14	50x75	13.3	50x96	14.6	65x115	21.4	65x120	22.2	65x130	23.4
1890		50x75	14.4	50x75	14.4	50x115	17.0	65x130	24.2	65x130	25.4	76x110	25.6
4700		50x75	15.8	50x96	17.4	65x96	19.2	65x130	27.9	76x120	28.2	76x130	29.4
5600		50x96	19	50x115	20.4	65x96	21.0	76x115	30.7	76x130	32.2	76x157	34.6
6800		50x96	21	50x130	12.7	65x115	24.7	76x155	35.4	76x155	38.0	89x157	40.5
8200		50x115	24.7	65x96	25.4	65x115	27.1	76x155	41.7	89x157	44.4	89x157	44.6
10000		65x96	28	65x96	28	65x130	31.5	89x157	49	89x157	49.4	89x196	53.9
12000		65x96	30.6	76x96	32.6	76x115	34.8	89x157	54.1	89x196	59.1	89x236	63.8
15000		65x130	38.6	76x96	39	76x130	40.8	89x196	66.2	89x236	71.1		
18000		65x130	42.2	76x130	44.6	76x155	57.8	86x236	76.9				
22000		76x130	49.4	76x155	53	89x157	56.5						
27000		76x130	54.7	89x131	58.2								
33000		89x131	65.2	89x157	69								
39000		90x157	75.3										

Ripple Current (mA,rms) at 40°C,100Hz or 120Hz

The specific capacitance and case size are available as per request.