

KNSCHA[®]

全 球 高 端 电 容 器 制 造 商

东莞市科尼盛电子有限公司

DONGGUAN KNSCHA ELECTRONICS CO., LTD.

规格承认书

Specification for approval

客户名称:

(Customer Name)

产品名称:

铝电解电容

(Product Name)

Aluminum Electrolytic Capacitors

型号规格:

(Specifications)

科尼盛料号:

SHA330UF450V01EC1941

(KNSCHA number)

KNSCHA SHA450V330 μ F Φ 30*40L

KNSCHA SHA450V330 μ F Φ 30*40L

制 造
(Manufacture)

Approval

拟 制
(Fiction)

审 核
(Chief)

核 准
(Approval)

刘淑芬

刘军军

徐贵南



客 户
(Customer)

Approval

检 验
(Inspect)

审 核
(Chief)

核 准
(Approval)

东莞市科尼盛电子有限公司

DONG GUAN KNSCHA ELECTRONICS CO.,LTD.

No. 8th floor, A3 building, R&D center (Phase I),

Songshan Lake Intelligent Valley, Liaobu Town, Dongguan City.

TEL:0769-83698067 81035570 FAX: 0769-83861559

Email: sales@knscha.com Website: <http://www.knscha.com>



SHA Series

Item Name	Rating	Case size	KNSCHA LIFE
SHA330UF450V01EC1941	SHA450V330μF	Φ 30*40L	3000 hours

1. Operating Temp. Range

- 25℃ ~ + 105℃

2. Electrical Characteristics

See Table 1.

【Table 1】

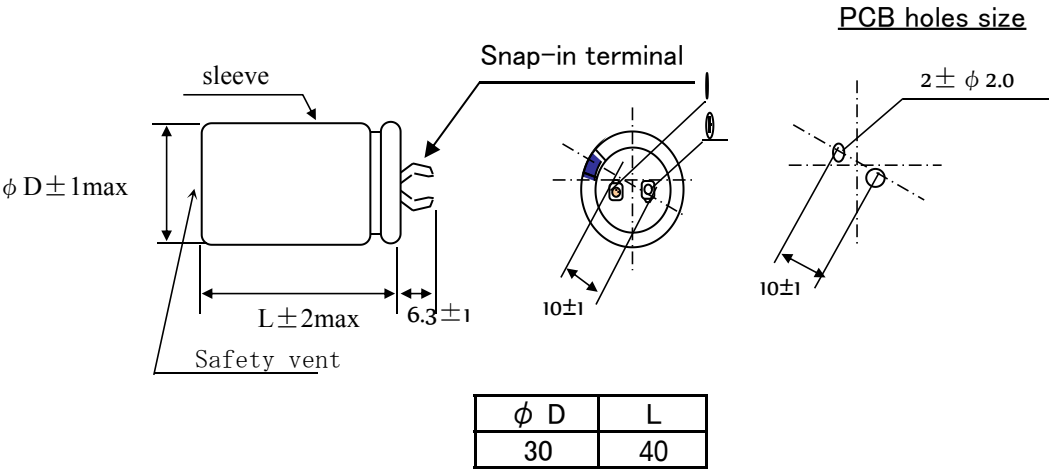
Rated Voltage VDC	Surge Voltage VDC	Nominal Static Capacitance (μF)	ToleranceonCap acitance (%) 20℃ 120Hz	Dissipation Factor (tanδ)max 20℃ 120Hz	Leakage Current 5min. 20℃ (μA)	Permissible Ripple Current (mArms) 105℃ 120Hz	Impedance(Ω) 100KHZ 20℃
450	500	330	-20~+20	0.15	2,970	1,700	0.47

容量超过1000 μ F; 每超过1000 μ F, 损失角增加0.02

3. Shape and Dimensions

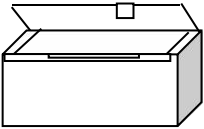
SHA Series

◆ Shape and Dimensions

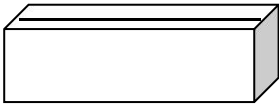


4. Packing shape

4-1 Inner Box



4-2 Outer box



4-3 Quantity per package

Unit (mm)

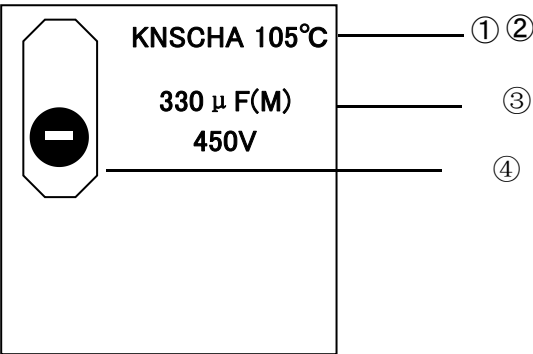
Φ D	L	Out box
30	35	264pcs

5. Marking

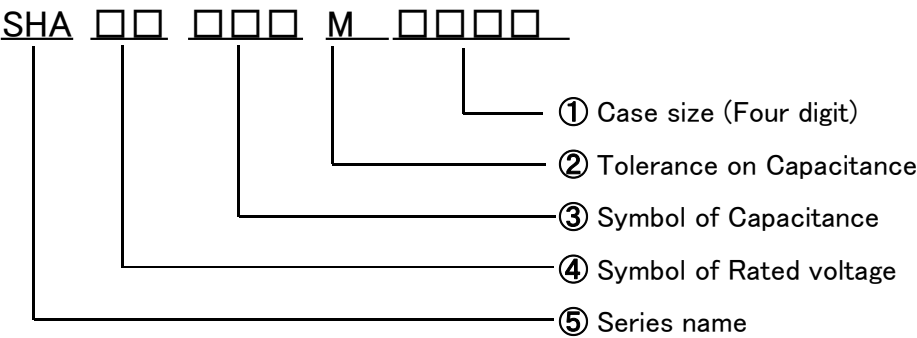
Following items are printed with white color on coffee color sleeve

- ① Trade Mark
- ② Max Operating Temp.
- ③ Rated voltage & Nominal Capacitance
Symbol of Capacitance Tolerance (M)
- ④ Polarity (negative)

Example of Marking



6. Type numbering system



④

Volt.	Symbol
450	2W

③

Capacitance	Example
330	331

①

Case size (Four digit) Example

Case size	Symbol
Φ 30*40	3040

②

Tolerance on Capacitance

M	± 20%

7. Characteristics
7-1.

No.	Item	Performance		Test Method						
1	Leakage Current	I= 2,970 μ A (I=0.02CV) μ A Whichever is smaller (After 5min)		Protection Resistor : 1000±10Ω Applied Volt : Rated Voltage Mesasuring time : 5minutes						
2	Static Capacitance	- 20% ~ + 20%		Measured Frequency : 120Hz±20% Measured Voltage ≤ 0.5Vrms, 1.5 ~ 2.0VDC						
3	Dissiption Factor (tanδ)	0.15 and Under		Same as condition of Capacitors						
4	High Temp. Load Charac-teristics	Leakage Current	≤the value specified in Table 1	Test Temp. : 105±2℃ Applied voltage: Rated voltage Test Time :3,000 hours +72, -0 hours						
		Cap. Change	≤ ±20% of initial value							
		Dissipation Factor	≤200% of value specified in Table							
		Appearance	No rSHArkable abnormality							
5	High Temp. no load Charac-teristics	Leakage Current	≤the value specified in Table 1	Test Temp. : 105±2℃ No voltage applied Test Time : 1,000 hours +24, -0 hurs						
		Cap. Change	≤ ±15% of initial value							
		Dissipation Factor	≤150% of value specified in Table							
		Appearance	No rSHArkable abnormality							
6	Impedance Ratio	<table><tr><td>W V</td><td>450</td></tr><tr><td>Z-25℃/Z+20℃</td><td>8</td></tr><tr><td>Z-40℃/Z+20℃</td><td>12</td></tr></table>		W V	450	Z-25℃/Z+20℃	8	Z-40℃/Z+20℃	12	
W V	450									
Z-25℃/Z+20℃	8									
Z-40℃/Z+20℃	12									
7	Temperature Charac -teristics	Stage	Item	Performance	Stage	Test Temp(℃)				
		2	Impedance Ratio	less than the value mentioned in 4-5,	1	20±2				
		4	Cap, Change	≤ ±25% against value in stage 3	2	-40±3;				
		After the capacitor is held at tempereture of each stage and reaches temperature stability, measure performance.			3	20±2				
					4	105±2				
					5	20±2				
8	Surge Voltage	Item	PerforSHAnce							
		Leakage Current	≤ the initial specified value							
		Cap, Change	≤ ±15% against value before test							
		Dissipation Factor	≤ the initial specified value							
		Appearance	No rSHAkable abnormality							
		Test Temp. 15~35℃ Test volt. Surge Volt.Specified in 2 Voltage apply. 1,000times of chage for 30±5sec, under frequency of 6±0.5sec, and discharge for 5min30sec.								

7-2.Characteristics

7. 2. Characteristics				
No.	Item	Performance		Test Method
9	Vibration Resistance	Capacitance	Stability required	Frequency : 10~55Hz/1min. Width of vibration, 1.5mm Direction and duration X, Y and Z directions, each for 2 hours (Total 9 hours)
		Cap. Change	≤±5% of the initial specified value	
		Appearance	No rSHArkable abnormality	
10	Solderbilty	3/4 area of surrounding directions of surface should be covered with new solder.		Solder: Sn-Ag, Sn-Cu Type Soldering Temp : 240±5°C Dipping degree : 2~2.5mm Flux : Ethanol solution (JIS K8101) or Isopropylalchol (JIS K8839) solution of Rosin (JIS K5902)
11	Resistance to Soldering	Leakage Current	≤ Initial specified value	Soldering Temp. 280±5°C
		Cap. Change	≤ ±10% of initial value	Soldering Time . 10±1sec.
		Dissipation Factor	≤ Initial specified in value	
		Appearance	No rSHArkable abnormality	
12	Resistance to Humidity	Leakage Current	≤ Initial specified value	Test Temp. : 40±2°C
		Cap. Change	≤ ±15% of initial value	Humidity 90~95%
		Dissipation Factor	≤ Initial spesified value	Test Time : 500 ± 8 hours
		Appearance	No rSHArkable abnormality	After the above condition,restored to normal temp, and then measured.
13	Perssure valve moment charact- erstics	There must not be thing ignition, scattering the resolution that that case works safely		Dcmethod: impress the reverse voltage and of 1A, I cancel an electric current.

8 Related Standards JIS C 5141

9 Marking on packing box

- ① Item name
- ② Series name
- ③ Rated Voltage
- ④ Nominal Static Capacitance
- ⑤ Case size
- ⑥ Lot No.
- ⑦ Quantity

10 Soldeing

- 10-1 Soldering by soldering iron
Temperature of iron top : 270~350°C
Operating time : within 3 sec.
- 10-2 Flow soldering.
Preheat : PCB surface temperature 120°C±5°C
Solder Temp : 260°C±5°C
Solder Dipping Temp. : 2~4sec.

11 Cleaning of PC boad after soldering

Using follwing solvents is possible but make sure followingcondition

Solvent

IPA or Alcoholic agent like Pinealpha ST-100S, Cleanthrough 750H, 750L, 710M, 750K, or Technocare FRW-14~17

- ① Cleaning should be made by ultrasonic within 5min, at the temperature less then 60°C.
- ② Control of pollution is necessary (conductivity,pH, specific gravity, water volume)
- ③ Please do not keep near cleaning agent. Please do not store in air-tight container.
Please let it dry by hot air at the temperature less than maximum operating temp.

12 Effective life for storage

Storage conditions:

- ① Temperature range must be between 5~35°C
- ② Relative humidity must be less than 75%
- ③ Must be stored indoor
- ④ Must be free from water, oil or salt water
- ⑤ Must be free from toxic gasses (hydrogen sulfide, sulfurous acid, chlorine, ammonium, etc.)
- ⑥ Must be free from ozone, ultraviolet rays or any other radiation
- ⑦ Must be kept in capacitor original package