

KNSCHA

Empowering The World

广东科尼盛电子科技有限公司

KNSCHA ELECTRONICS CO.,LIMITED

IATF16949:2016

ISO9001:2015

ISO14001:2015

部品规格书 APPROVE SHEET

客 户 名 称 Customer Name	
产 品 名 称 Product Name	高分子固态电解电容器 Conductive Polymer Aluminum Electrolytic Capacitors
客 户 料 号 Customer P/N	
科 尼 盛 料 号 KNSCHA P/N	217EC0042
型 号 规 格 Product Type	50V/220 μ F 2000Hours@105 $^{\circ}$ C 贴片型,10x10.5mm KHV Series
日 期 Date	2024年10月24日

制 造 Manufacture	
核 准 APPROVAL	制 作 PREPARED
王 伟	刘 国 华

客 户 承 认 栏 CUSTOMER APPROVED		
核 准 APPROVED	确 认 CHECKED	经 办 DESIGNED

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Aluminum Electrolytic Capacitors

- Source Manufacturer
- 25+ Years Experience
- 7X24 Hours Online Service



Film Capacitors

- Source Manufacturer
- 10+ Years Experience



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EN ¹⁰

DE

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Empowering The World

KNSCHA ELECTRONICS CO.,LIMITED is a manufacturing high-tech enterprise founded in 1987 with aluminum electrolytic capacitors and film capacitors as its core for automotive, renewable energy, industrial and consumer electronics.We are working on developing aluminum electrolytic capacitors and plastic film capacitors having higher performance and higher reliability and its product chain extends to multiple categories such as electric double layer capacitors,ceramic capacitors and resistors under the trademark “KNSCHA”, quickly responding to customer needs.

KNSCHA's manufacturing facilities are located in Guangdong, Hunan and Jiangxi and employ over 380 peoples. Our state-of-art manufacturing facilities including R&D, testing labs, automated manufacturing, warehousing and customer service are operate with high quality standard, using Lean manufacturing processes with a comprehensive ISO 9001/14001 and IATF 16949 management systems.

Our products have obtained UL, VDE, TÜV, ENEC10, KTL, and CQC safety certification, and comply with SGS's RoHS, Reach, AECQ-200 and National Grid Testing standards.

As a supporter of this advanced electronic industry, we are very pleased to have contributed to its development.

WHO WE ARE

Plastic Film Capacitors
Aluminum Electrolytic Capacitors



**KNSCHA has knowledge and know-how as a capacitor professional manufacturer.
We are always comitted to the original performance our customers need.
We solves problems together with our customers.**

KNSCHA

Empowering The World



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特性/ Features

- Load Life: 2000 hours at 105°C
- Ultra low ESR with Large Ripple Current, SMD type
- RoHS Compliant
- Suitable for Switching Power Supply, DC/DC Converter, PDP /CD TV and Digital equipment.
- 105°C 负荷寿命2000小时
- 低阻抗、大纹波电流
- 贴片型固态电容器
- 符合RoHS指令



ΦD=5~8mm



ΦD=10mm

Marking color: Red

贴片型SMD

■ 表1 规格表 Specifications

项目 Items	性能 Performance	
工作温度范围 Operating Temperature Range	-55°C ~ +105°C	
额定电压范围 Rated Voltage Range	2.5~100V	
额定静电容量容许误差值 Capacitance Tolerance	± 20% (120 Hz, 20°C)	
漏电流 Leakage Current (at 20°C)	$I \leq 0.2CV$ (uA. After 2 minutes) 充电2分钟后漏电流 $I \leq 0.2VC$	
损失角正切值 Tanδ (at 120 Hz, 20°C)	Not to exceed the value specified 不超过指定值	
ESR(100KHz)	Not to exceed the value specified 不超过指定值	
耐久性 Endurance 不超过额定电压 105°C, 2000H at rated voltage 105°C 2000h	Capacitance Change	Within ±20% of the value before test 测试前的值的±20%以内
	Leakage Current	Not to exceed the value specified 不超过指定值
	ESR	Not to exceed 150% of the value specified 不超过指定值的150%
	Dissipation Factor	Not to exceed 150% of the value specified 不超过指定值的150%
耐湿性 Moisture Resistance Stored at 60°C, RH90~95% 2000H 存放在60°C, RH90~95% 2000h	Capacitance Change	Within ±20% of the value before test 测试前的值的±20%以内
	Leakage Current	Not to exceed the value specified 不超过指定值
	ESR	Not to exceed 150% of the value specified 不超过指定值的150%
	Dissipation Factor	Not to exceed 150% of the value specified 不超过指定值的150%

■ 表2 纹波电流的频率系数
Frequency Coefficient For Ripple Current

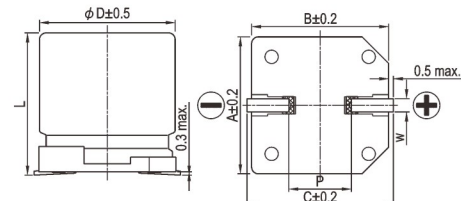
Frequency	120Hz≤freq. <10KHz	1KHz≤freq. <10KHz	10KHz≤freq. <100KHz	100KHz≤freq. <300KHz
Coefficient	0.05	0.3	0.7	1

■ 表3 外形尺寸 Dimensions(mm)

Lead Spacing and Diameter

Unit: mm

ΦD	5	6.3	6.3	8	10
A	5.3	6.6	6.6	8.3	10.3
B	5.3	6.6	6.6	8.3	10.3
C	5.7	7.2	7.2	9.0	10.0
P	1.5	2.2	2.2	3.1	4.5
L	5.8±0.3	5.8±0.3	7.7±0.3	10.5±0.3	10.5±0.3
W	0.5~0.8			0.8~1.0	



Marking

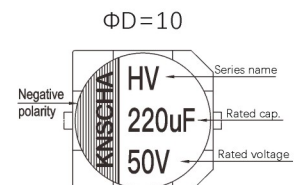
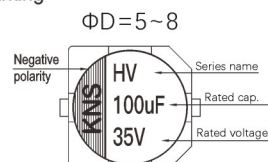


表4 标准品一览表 Standard Size

Standard Ratings

Dimension: ϕ D $\times$ L(mm)
Ripple Current: mA/rms at 100k Hz, 105°C

Rated Volt. (V)	Capacitance (μ F)	Size ϕ D $\times$ L(mm)	$\tan\delta$ (120Hz, 20°C)	L C (μ A)	ESR (m Ω /at 100k Hz,20°C max.)	Rated R. C. (mA/rms at 100k Hz, 105°C)
2.5V	330	6.3*5.8	0.10	500	28	2400
	330	6.3*7.7	0.10	500	25	2550
	390	6.3*7.7	0.10	500	25	2650
	470	6.3*7.7	0.10	500	22	2750
	560	6.3*5.8	0.10	500	25	2600
6.3	100	6.3X5.8	0.12	500	38	1300
	220	5X5.8	0.12	500	42	1450
		6.3X5.8	0.12	500	38	1600
	330	6.3X5.8	0.12	500	28	1900
	470	6.3X7.7	0.12	592	25	2750
	560	6.3X7.7	0.12	705	25	3100
	680	6.3X7.7	0.12	857	25	3500
	820	6.3X7.7	0.12	1033	22	3750
		8X10.5			20	4100
	1000	8X10.5	0.12	1260	20	4350
		10X10.5			20	4500
	1500	8X10.5	0.12	1890	20	4550
	2200	10X10.5	0.12	2772	20	4800
10V	100	6.3X5.8	0.12	500	48	1250
	220	6.3X5.8	0.12	500	38	1650
		6.3X7.7			35	2150
	330	6.3X7.7	0.12	660	32	2350
		8X10.5			28	2950
	470	6.3X7.7	0.12	940	32	2600
		8X10.5			28	3100
	560	8X10.5	0.12	1120	28	3350
	680	8X10.5	0.12	1360	28	3450
	820	8X10.5	0.12	1640	28	3600
	1000	8X10.5	0.12	2000	25	3950
	1500	10X10.5	0.12	3000	25	4100

制品尺寸与容许纹波电流一览表

尺寸: 直径(ϕ D) $\times$ 长度(L), (毫米/mm)
容许纹波电流: 毫安/均方根值(mA/rms), 120 赫兹(Hz), 105°C

Dimension and Permissible Ripple Current

Dimension: $\phi D \times L$ (mm)
Ripple Current: mA/rms at 120 Hz, 105°C

Rated Volt. (V)	Capacitance (μ F)	Size $\phi D \times L$ (mm)	$\tan\delta$ (120Hz, 20°C)	L C (μ A)	ESR (m Ω /at 100k Hz,20°C max.)	Rated R. C. (mA/rms at 100k Hz, 105°C)
16V	10	6.3X5.8	0.12	500	75	650
	47	5X5.8	0.12	500	65	650
		6.3X5.8	0.12	500	58	950
	100	5X5.8	0.12	500	68	780
		6.3X5.8	0.12	500	55	1150
	150	6.3X5.8	0.12	500	48	1500
		6.3X7.7	0.12	500	38	2100
	220	6.3X7.7	0.12	704	35	2450
		6.3X7.7	0.12	864	35	2500
	270	8*10.5			32	2720
	330	6.3X7.7	0.12	1056	35	2550
		8X10.5			32	2800
		10X10.5			30	3350
	470	8X10.5	0.12	1504	28	2900
		10X10.5	0.12		25	3500
	560	8X10.5	0.12	1792	28	3050
		10X10.5			25	3750
	680	8X10.5	0.12	2176	28	3200
		10X10.5			25	3850
	820	8X10.5	0.12	2624	28	3350
		10X10.5			25	4100
	1000	10X10.5	0.12	3200	25	4350
25V	10	6.3X5.8	0.12	500	78	550
	22	5X5.8	0.12	500	65	650
	47	6.3X5.8	0.12	500	48	850
	68	5X5.8	0.12	500	78	680
	100	6.3X5.8	0.12	500	48	950
		6.3X7.7			45	1650
	220	6.3X7.7	0.12	1100	35	1950
		8X10.5			32	2500
	330	8X10.5	0.12	1650	32	2650
	470	8X10.5	0.12	2350	30	2800
		10X10.5			28	3150
	560	8X10.5	0.12	2800	28	3050
	680	8X10.5	0.12	3400	28	3200
		10X10.5			25	3350
	820	10X10.5	0.12	4100	25	3650
	1000	10X10.5	0.12	5000	25	3800

制品尺寸与容许纹波电流一览表

尺寸：直径(ϕD) $\times$ 长度(L), (毫米/mm)
容许纹波电流：毫安/均方根值(mA/rms), 120 赫兹(Hz), 105°C

Dimension and Permissible Ripple Current

Dimension: $\phi D \times L$ (mm)
Ripple Current: mA/rms at 120 Hz, 105°C

Rated Volt. (V)	Capacitance (μ F)	Size $\phi D \times L$ (mm)	$\tan\delta$ (120Hz, 20°C)	L C (μ A)	ESR (m Ω /at 100k Hz,20°C max.)	Rated R. C. (mA/rms at 100k Hz, 105°C)
35V	10	6.3X5.8	0.12	500	78	480
	22	5X5.8	0.12	500	85	410
		6.3X5.8	0.12	500	58	550
	47	6.3X5.8	0.12	500	58	750
		6.3X7.7			52	1150
	68	6.3X7.7	0.12	500	48	1300
	100	6.3X7.7	0.12	700	48	1500
		8X10.5			38	1950
	150	8X10.5	0.12	1050	38	2100
	220	8X10.5	0.12	1540	38	2300
	330	8X10.5	0.12	2310	35	2450
		10X10.5			32	2700
	470	8X10.5	0.12	3290	35	2650
		10X10.5			28	2950
50V	560	10X10.5	0.12	3920	28	3350
	2.2	5X5.8	0.12	500	85	290
	10	6.3X5.8	0.12	500	78	350
	22	6.3X5.8	0.12	500	58	460
	47	6.3X7.7	0.12	500	45	950
	100	8X10.5	0.12	1000	38	1650
		10X10.5			35	1800
	150	8X10.5	0.12	1500	35	1900
		10X10.5			30	2150
63V	220	10X10.5	0.12	2200	28	2350
	8.2	5X5.8	0.12	500	68	310
	10	6.3X5.8	0.12	500	68	310
	22	6.3X7.7	0.12	500	58	420
	47	8X10.5	0.12	592	48	1100
	56	8X10.5	0.12	705	45	1250
	100	8X10.5	0.12	1260	38	1500
		10X10.5			32	1600
80V	150	10X10.5	0.12	1890	28	1950
	10	6.3X7.7	0.12	500	68	290
	47	8X10.5	0.12	752	58	980
		10X10.5			55	1250
100V	100	10X10.5	0.12	1600	48	1500
	10	6.3X5.8	0.12	500	82	225
	22	6.3X7.7	0.12	500	48	320
		8X10.5			45	660
	47	10X10.5	0.12	940	45	1050

制品尺寸与容许纹波电流一览表

尺寸: 直径(ϕD) $\times$ 长度(L), (毫米/mm)
容许纹波电流: 毫安/均方根值(mA/rms), 120 赫兹(Hz), 105°C