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	基板自立型牛角铝电解电容器 Snap-in Aluminum Electrolytic Capacitors
客 户 料 号 Customer P/N	
科 尼 盛 料 号 KNSCHA P/N	LSR450M227R302S1AA(203EC1339)
型 号 规 格 Product Type	450V/220μF 3000Hours@105℃ 插件,25xL30mm PET咖啡银字
日期 Date	2024年10月21日

制 造 Manufacture	
核 准 APPROVAL	制 作 PREPARED

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

cULus EAC VDE CQC KC TÜV

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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.

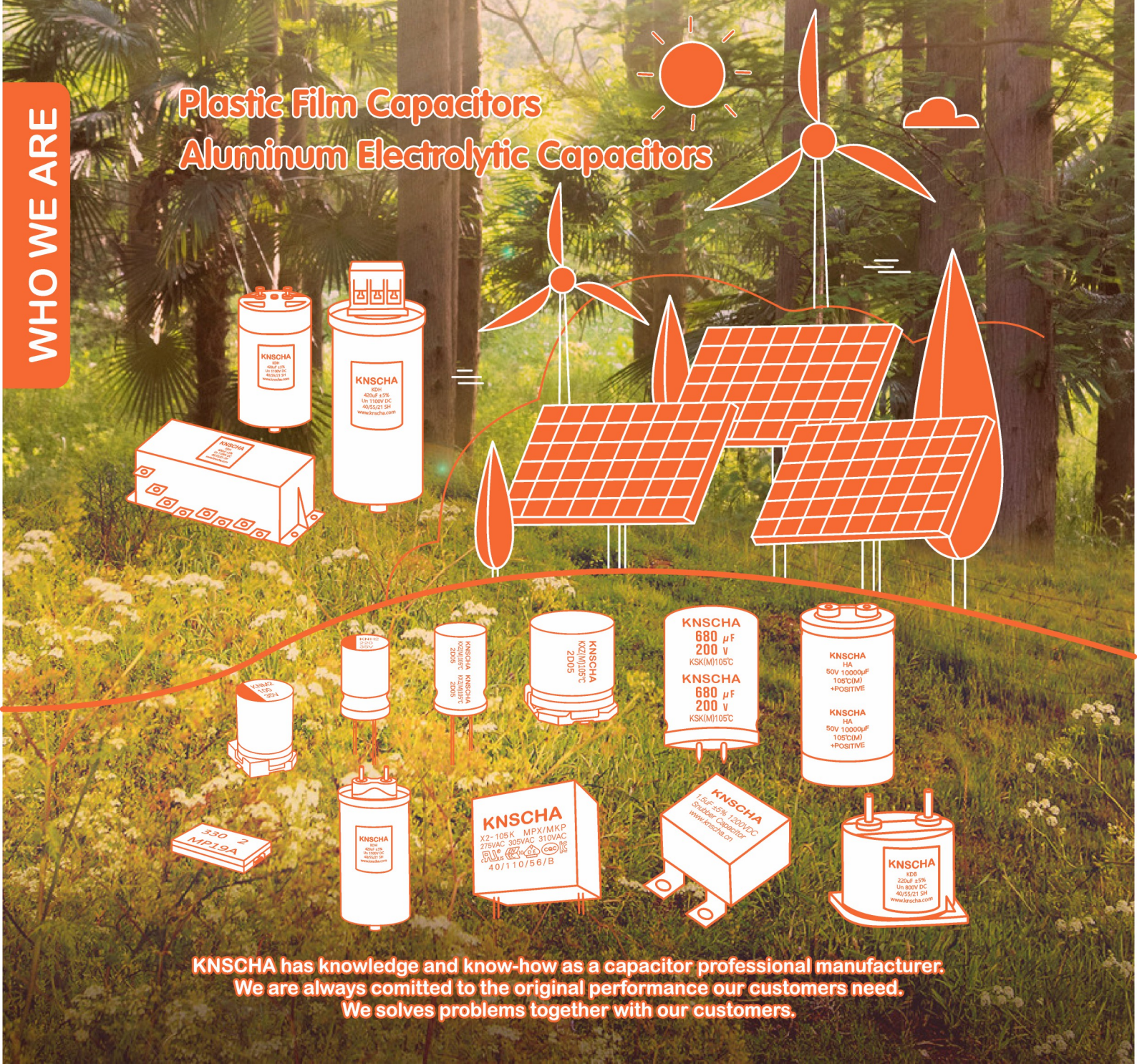
KNSCHA’s manufacturing facilities are located in Guangdong, Hunan and Jiangxi and employ over 380 peoples.Our state-of-art manufacturing facilities including R&D, testing labs, automated manufacturing, warehousing and customer service are operate with high quality standard, using Lean manufacturing processes 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.

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PRODUCT CHARACTERISTICS

KNSCHA P/N	Cap. (120Hz) (μF)	Cap. Tol. (%)	Rate Volt. (VDC)	Surge Volt. (VDC)	Temperature Range (°C)	Case Size ΦDxL(mm)	Leakage Current Max(uA)	Dissipation Factor (MAX)	Ripple Current 120HZ (Arms)	ESR 100KHZ (Ω)	Load Life (Hours)
LSR450M227R302S1AA	220	±20	450	500	-25~+105	25x30	943	0.15	1.45	/	3000

KSR Series Aluminum Electrolytic Capacitors

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特性/ Features

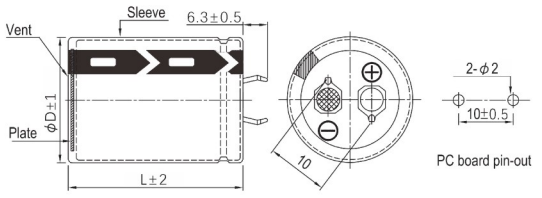
- High ripple current and Miniaturized
- Load Life:3000 hours at 105℃
- RoHS compliant
- 高纹波缩体品
- 105℃负荷寿命 3000小时
- 符合RoHS指令

基板自立Snap-in

■表1 规格表 Specifications

项目 Items	性 能 Performance					
工作温度范围 Category Temperature Range	200~450V					
	-25℃~+105℃					
额定静电容量容许误差值 Capacitance Tolerance	± 20% (120 Hz, 20℃)					
漏电流 Leakage Current(at 20℃)	测试时间 Time	3 分钟后 after 3 minutes				
	漏电流 Leakage Current	I = 0.02CV				
	I = 漏电流(μA/微安)、C = 额定静电容量(μF/微法拉)、V = 额定直流工作电压(V/伏特) Where,C = rated capacitance in μF,V = rated DC working voltage in V					
损失角正切值 Tanδ (at 120 Hz, 20℃)	额定电压 Rated Voltage	200	250	400	450	
	损失角正切值 Tanδ (max)	0.18	0.15	0.20	0.20	
	当额定静电容量大于1,000微法拉时，每增加1,000微法拉需加0.02。 When the capacitance exceeds 1,000μF,0.02 shall be added every 1,000μF increase.					
温度特性(120 Hz) Low Temperature Characteristics	阻抗比不可大于下表所列数值 Impedance ratio shall not exceed the values given in the table below.					
	额定电压 Rated Voltage	200	250	400	450	
	阻抗比 Impedance Ratio Z(-25℃)/Z(+20℃)	4	4	8	8	
	阻抗比 Impedance Ratio Z(-40℃)/Z(+20℃)					
耐久性 Endurance	保证寿命时间 Test Time	3,000 hours				
	静电容量变化率 Capacitance Change	≦初始值的± 25% Within ±25% of initial value				
	损失角正切值 Tanδ	≤初始规格值的200% Less than 200% of specified value				
	漏电流 Leakage Current	≦初始规格值 Within specified value				
	*于 105℃环境中供给容许纹波电流值与额定电压 3,000 小时后，待制品回复至 20℃的环境中进行量测时，需满足上列要求。 *The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied with rated ripple current for 3,000 hours at 105℃.					
高温无负荷特性 Shelf Life Test	保证寿命时间 Test Time	1,000 hours				
	静电容量变化率 Capacitance Change	≦初始值的± 25% Within ±25% of initial value				
	损失角正切值 Tanδ	≤初始规格值的200% Less than 200% of specified value				
	漏电流 Leakage Current	≦初始规格值 Within specified value				
	*于 105℃环境中不供给额定电压 1,000 小时后，待制品回复至 20℃的环境中进行量测时，需满足上列要求。 *The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied.					

■表2 外形尺寸 Dimensions(mm)



Lead Spacing and Diameter

Unit: mm

ΦD±1	20,22,25.4						30,35				
L±2	25	30	35	40	45	50	30	35	40	45	50

■表3 纹波电流与频率补正系数

Ripple Current and Frequency Multipliers

Cap.(μF) \ Freq.(Hz)		120	1K	10K	100K
Coefficient	330~680	1.00	1.30	1.41	1.43
	820~22000	1.00	1.20	1.25	1.30

本产品目录之规格如有变更恕不另行通知(Cat. 2024C1) All product specifications in the catalog are subject to change without notice.

■表4 标准品一览表 Standard Size

Dimension: ϕD × L(mm)
Impedance: Ω/at 100k Hz, 20°C
Ripple Current: mA/rms at 100k Hz, 105°C

Dimension and Permissible Ripple Current

Rated Volt.(Voc)	200		
Item / Cap.(μF)	D×L	IMP	R. C.
220	22*21	0.690	1100
330	25*21	0.620	1250
470	25*25	0.430	1550
560	25*30	0.400	1680
560	30*25	0.380	1750
680	30*30	0.350	1780
680	35*21	0.330	1850
820	30*30	0.310	2100
820	35*25	0.280	2100
1000	35*25	0.260	2300
1000	35*30	0.240	2300
1200	35*30	0.220	2550
1500	35*35	0.200	2650
1800	35*40	0.180	2800
2200	35*45	0.160	3100
3300	35*60	0.140	3600

制品尺寸与容许纹波电流一览表

尺寸：直径(ϕD)×长度(L)，(毫米/mm)
阻抗值：欧姆(Ω)/最大值，100k 赫兹(Hz), 20℃
容许纹波电流：毫安/均方根值(mA/rms)，100k 赫兹(Hz), 105℃

Dimension: ϕD × L(mm)
Impedance: Ω/at 100k Hz, 20°C
Ripple Current: mA/rms at 100k Hz, 105°C

Dimension and Permissible Ripple Current

Rated Volt.(Voc)	250		
Item / Cap.(μF)	D×L	IMP	R. C.
220	22*21	0.620	1250
330	25*25	0.430	1550
470	30*25	0.400	1680
470	35*21	0.380	1750
560	30*30	0.350	1780
560	35*25	0.330	1850
680	30*25	0.310	2100
680	35*21	0.280	2100
820	35*30	0.260	2300
820	35*35	0.240	2300
1000	35*35	0.220	2550
1000	35*40	0.200	2650
1200	35*40	0.180	2800
1500	35*45	0.160	3100
1800	35*50	0.140	3300
2200	35*60	0.120	3500
2200	35*65	0.120	3500

制品尺寸与容许纹波电流一览表

尺寸：直径(ϕD)×长度(L)，(毫米/mm)
阻抗值：欧姆(Ω)/最大值，100k 赫兹(Hz), 20℃
容许纹波电流：毫安/均方根值(mA/rms)，100k 赫兹(Hz), 105℃

Dimension and Permissible Ripple Current

Dimension: ϕD × L(mm)
Impedance: Ω/at 100k Hz, 20°C
Ripple Current: mA/rms at 100k Hz, 105°C

Rated Volt.(Vdc)	400		
Item / Cap.(μF)	D×L	IMP	R. C.
100	22*22	1.75	1020
100	22*25	1.50	1020
120	22*25	1.45	1050
150	25*25	1.40	1100
180	25*25	1.38	1150
220	25*25	1.25	1300
220	30*22	1.20	1350
200	30*25	1.15	1450
270	22*40	1.10	1750
270	25*30	1.10	1750
270	30*25	1.10	1850
270	35*22	1.05	1880
330	25*30	1.00	2000
330	30*25	0.98	2150
330	30*30	0.95	2200
390	30*30	0.90	2300
390	35*22	0.80	2350
470	35*30	0.70	2500
470	35*35	0.60	2550
560	35*35	0.55	2800
680	35*35	0.45	2950
820	35*40	0.40	3050
1000	35*50	0.95	3300

Rated Volt.(Vdc)	450		
Item / Cap.(μF)	D×L	IMP	R. C.
82	25*25	1.50	1050
100	25*25	1.45	1130
120	25*25	1.40	1180
150	25*25	1.38	1250
180	25*30	1.25	1300
220	25*30	1.05	1450
220	25*40	0.98	1480
220	30*25	0.98	1480
220	35*22	0.95	1500
270	25*40	0.90	1650
270	35*22	0.85	1700
270	35*30	0.80	1730
330	35*30	0.75	1900
330	30*30	0.70	1950
330	35*25	0.65	2000
330	30*35	0.60	2150
470	35*30	0.55	2600
470	35*35	0.45	2700
560	35*35	0.40	2950
680	35*40	0.38	3050
820	35*45	0.33	3200
1000	35*55	0.29	3350

制品尺寸与容许纹波电流一览表

尺寸：直径(ϕD)×长度(L)，(毫米/mm)
阻抗值：欧姆(Ω)/最大值，100k 赫兹(Hz), 20℃
容许纹波电流：毫安/均方根值(mA/rms)，100k 赫兹(Hz), 105℃

■表5 产品编码说明 Part Numbering System

L	SR	450	M	227	R30	4	S1	A	A
电容器类别 Capacitors Name	系列名 Series Name	额定电压 Rated voltage	额定静电容量容许误差值 Capacitance tolerance	额定静电容量 Capacitance	制品尺寸 Case size	PET套颜色管 PET Sleeve color	加工形状 Processing shape	电气特性 Electrical characteristics	内部特征码 Internal use
基板自立型铝电解电容器 Snap-in Aluminum Electrolytic Capacitors	KSR Series	范例Example: Voltage / Symbol: 6.3V 6R3; 10V 010; 250V 250	M=±20%	范例Example: Cap. / Symbol: 0.1μF 104; 2.2μF 225; 33μF 336; 470μF 477; 6800μF 688; 82000μF 829	范例Example: ϕDxL (mm) / Symbol: 25x30 R30	咖啡体银字 Coffee body silver print			

⚠如需了解更详细之介绍，请联系我们
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