KNSCHA
Empowering The World

广东科尼盛电子科技有限公司
KNSCHA ELECTRONICS CO., LIMITED

规格承认书

Specification for approval

客户名称: (Customer Name)	深圳市立创商城电子商务有限公司
产品名称: (Product Name)	电解电容 Aluminum Electrolytic Capacitor
客户料号: (Customer part number)	
科尼盛料号: (KNSCHA number)	DUK400M685G12KS1AA
型号规格: (Specifications)	400V/6.8UF 8*12mm KUK
日期: DATE	2025.2.26

制 造 Manufacture	
核 准 APPROVAL	制 作 PREPARED
王师	陆美秀

客户承认栏 CUSTOMER APPROVED		
核 准 APPROVED	确 认 CHECKED	经 办 DESIGNED

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KUK Series Aluminum Electrolytic Capacitors

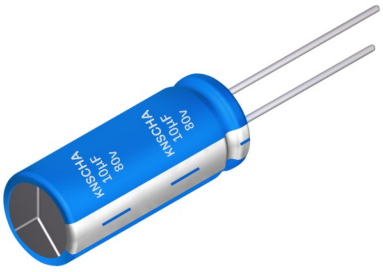
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特性/ Features

- 125℃ high temp. long life
- Low impedance and high-ripple current
- For automobile modules and other high temperature applications
- Load Life:5000 hours at 125℃
- RoHS compliant
- 高频低阻、高纹波
- 可应用汽车模块与高温产品
- 125℃负荷寿命5000小时



ΦD < 13mm



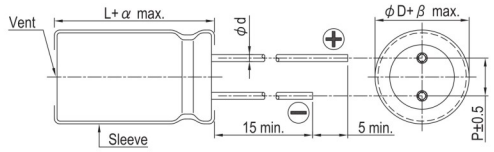
ΦD ≥ 13mm

引线型Radial

■表1 规格表 Specifications

项目 Items	性 能 Performance											
工作温度范围 Category Temperature Range	6.3~100V								200~450V			
	-40℃~+125℃								-25℃~+125℃			
额定静电容量容许误差值 Capacitance Tolerance	± 20% (120 Hz, 20℃)											
漏电流 Leakage Current(at 20℃)	额定电压 Rated voltage	≦100V							> 100V			> 100V
	测试时间 Time	2 分钟后 after 2 minutes							1 分钟后 after 1 minutes			2 分钟后 after 2 minutes
	漏电流 Leakage Current	I≤0.01CV或 3(μA/微安) 之中任一个较大值以下 whichever is greater							I≤0.04CV+100(μA/微安)			I≤0.03CV+10(μA/微安)
	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	10	16	25	35	50	63	80	100	200	400	450
	损失角正切值 Tanδ (max)	0.22	0.19	0.18	0.16	0.12	0.10	0.09	0.08	0.18	0.24	0.24
	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		10	16	25	35	50	63	80	100	200	400	450
	阻抗比 Impedance Ratio	Z(-25℃)/Z(+20℃)	3	2	2	2	2	2	2	2	6	6	6
		Z(-40℃)/Z(+20℃)	6	4	4	4	4	4	4	4			
耐久性 Endurance	保证寿命时间 Test Time	5,000 hours										
	静电容量变化率 Capacitance Change	≦初始值的± 30% Within ±30% of initial value										
	损失角正切值 Tanδ	≤初始规格值的200%或0.4(取较大者) Less than 200% of specified value or 0.4 whichever is greater										
	漏电流 Leakage Current	≦初始规格值 Within specified value										
	*于 125℃环境中供给容许纹波电流值与额定电压 5,000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 5,000 hours at 125℃.											
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± 30% Within ±30% of initial value										
	损失角正切值 Tanδ	≤初始规格值的200%或0.4(取较大者) Less than 200% of specified value or 0.4 whichever is greater										
	漏电流 Leakage Current	≦初始规格值 Within specified value										
	*于 125℃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 125℃ without voltage applied.											

■表2 外形尺寸 Dimensions(mm)



Lead Spacing and Diameter

Unit: mm

β	±0.5			±1.0			
ΦD	5	6.3	8	10	12.5,13	16	18
Φd±0.05	0.5		0.6			0.8	
P±0.5	2	2.5	3.5	5.0		7.5	
L±α	L < 16: α=1.5; L ≥ 16: α=2.0						

■表3 纹波电流与频率补正系数

Ripple Current and Frequency Multipliers

6.3V~100V

Cap.(μF) \ Freq.(Hz)	120	1K	10K	100K
Coefficient 4.7~10	0.42	0.60	0.80	1.00
22~33	0.55	0.75	0.90	1.00
47~330	0.70	0.85	0.95	1.00
470~1000	0.75	0.90	0.98	1.00
2200~	0.80	0.95	1.00	1.00

200V~450V

F (Hz)	60(50)	120	1K	10K	100K
Coefficient	0.40	0.50	0.75	0.90	1.00

■表4 标准品一览表 Standard Size

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)	10			16			25			35		
Surge Volt.(Vdc)	13			20			32			44		
Item / Cap.(μF)	D×L	IMP	R. C.	D×L	IMP	R. C.	D×L	IMP	R. C.	D×L	IMP	R. C.
47							8×12	0.50	260			
56							6.3×11		200			
100				8×12	0.320	340	8×12	0.320	340	10×12.5	0.150	620
220	8×12	0.320	340	10×12.5	0.150	620	10×12.5	0.150	620	10×16	0.094	790
330	10×12.5	0.150	620	10×12.5	0.150	620	10×16	0.094	790	10×20	0.075	950
470	10×16	0.150	790	8×16	0.130	900	10×20	0.075	950	13×20	0.058	1080
				10×16	0.094	790						
1000	10×20	0.075	950	10×20		940	13×25	0.040	1350	16×25.5	0.031	1620
				13×20	0.058	1080						
2200	13×25	0.040	1350	16×25.5	0.031	1620	16×31.5	0.025	1860	18×31.5	0.032	3000
3300	16×25.5	0.031	1620	16×31.5	0.025	1860						
4700	16×31.5	0.025	1860									

Rated Volt.(Vdc)	50			63			100			200		400	
Surge Volt.(Vdc)	63			79			125			250		450	
Item / Cap.(μF)	D×L	IMP	R. C.	D×L	IMP	R. C.	D×L	IMP	R. C.	D×L	R. C.	D×L	R. C.
4.7							8×12	2.000	130			10×20	53
10	8×12	0.750	180				8×12	1.500	150	10×20	78	10×16	60
												10×25	86
22	8×12	0.500	250				10×12.5	0.800	480	10×25	126	13×30	142
33	8×12	0.500	280	8×12	1.500	150	10×12.5	0.800	480	13×20	157	16×25.5	189
47	8×12	0.500	280	10×12.5	0.590	530	10×16	0.550	630	13×25	204	16×31.5	243
100	10×12.5	0.200	520	10×16	0.410	690	13×20	0.250	990	16×25.5	329		
220	10×20	0.098	880	13×20	0.160	1050	16×25.5	0.110	1500				
330	13×20	0.081	990	13×25	0.120	1290	16×31.5	0.079	1790				
470	13×25	0.059	1150	13×30	0.097	1460							
1000	16×31.5	0.032	1590	16×31.5	0.059	1850							

Rated Volt.(Vdc)	80			200			400			450		
Surge Volt.(Vdc)	100			250			450			500		
Item / Cap.(μF)	D×L	IMP	R. C.	D×L	IMP	R. C.	D×L	IMP	R. C.	D×L	IMP	R. C.
2.2										10×12.5		57
4.7												
10	6.3×14	0.80	150									
22												
33							12.5×25	1.50	165 (120HZ)			
47												
100				16×25.5		329						
120				18×25.5		380						
150				18×25.5		400						

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

D	UK	107	M	050	S1	A	E	H1C	A
电容器类别 Capacitors Name	系列名 Series Name	额定静电容量 Capacitance	额定静电容量容许误差值 Capacitance tolerance	额定电压 Rated voltage	加工形状 Processing shape	电气特性 Electrical characteristics	PET套颜色管 PET Sleeve color	制品尺寸 Case size	内部特征码 Internal use
引线型铝电解电容器 Leaded Aluminum Electrolytic Capacitors	KUK Series	范例Example: Cap. / Symbol: 0.1μF 104; 2.2μF 225; 33μF 336; 470μF 477; 6800μF 688; 82000μF 829	M=±20%	范例Example: Voltage / Symbol: 6.3V 6R3; 10V 010; 250V 250			宝蓝体银字 Blue body silver print	范例Example: φDxL (mm) / Symbol: 10x12.5 H1C	

⚠如需了解更详细之介绍，请联系我们
Note:For more details ,please contact us
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