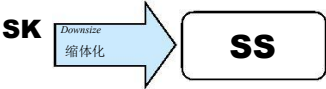


SS Series

WIDE TEMPERATURE RANGE, HEIGHT 5MM

5MM 高，宽温品

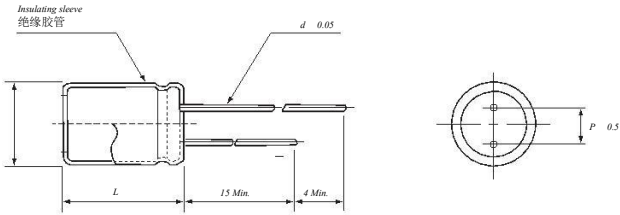
- Super miniature series with 5mm height
5mm 高，超小型系列
- Suitable to replace tantalum capacitors at low cost
可替换价格较高的钽电容器
- Endurance 2000 hours
耐久性2000 小时
- Comply with the RoHS & REACH
符合RoHS 与 REACH



SPECIFICATIONS 特性表

Items 项目	Characteristics 主要特性																										
Category Temperature Range 工作温度范围	-40 ~ +105°C																										
Voltage Range 额定工作电压范围	4 ~ 50V																										
Capacitance Range 静电容量范围	0.1 ~ 470 μ F																										
Capacitance Tolerance 静电容量允许偏差	±20% at 120Hz, 20°C																										
Leakage Current 漏电流	Leakage current 0.01CV or 3 μ A, whichever is greater (after 2 minutes application of rated voltage at 20 °C) 漏电流 0.01CV or 3 μ A, 取较大值（在20 °C环境中施加额定工作电压2分钟后） C: Nominal capacitance (μ F) 标称静电容量, V: Rated voltage (V) 额定电压																										
Dissipation Factor (tan δ) 损耗角正切	Measurement frequency 测试频率: 120Hz, Temperature 温度: 20°C <table><tr><td>Rated Voltage (V) 额定工作电压</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>tan δ (max.) 最大损耗角正切</td><td>0.35</td><td>0.27</td><td>0.23</td><td>0.19</td><td>0.15</td><td>0.13</td><td>0.11</td></tr></table>							Rated Voltage (V) 额定工作电压	4	6.3	10	16	25	35	50	tan δ (max.) 最大损耗角正切	0.35	0.27	0.23	0.19	0.15	0.13	0.11				
Rated Voltage (V) 额定工作电压	4	6.3	10	16	25	35	50																				
tan δ (max.) 最大损耗角正切	0.35	0.27	0.23	0.19	0.15	0.13	0.11																				
Stability at Low Temperature 低温特性	Measurement frequency 测试频率: 120Hz <table><tr><td>Rated Voltage (V) 额定工作电压</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25~50</td></tr><tr><td>Impedance Ratio 阻抗比</td><td>Z(-25°C) / Z(+20°C)</td><td>7</td><td>3</td><td>3</td><td>2</td><td>2</td></tr><tr><td></td><td>Z(-40°C) / Z(+20°C)</td><td>12</td><td>8</td><td>5</td><td>4</td><td>3</td></tr></table>							Rated Voltage (V) 额定工作电压	4	6.3	10	16	25~50	Impedance Ratio 阻抗比	Z(-25°C) / Z(+20°C)	7	3	3	2	2		Z(-40°C) / Z(+20°C)	12	8	5	4	3
Rated Voltage (V) 额定工作电压	4	6.3	10	16	25~50																						
Impedance Ratio 阻抗比	Z(-25°C) / Z(+20°C)	7	3	3	2	2																					
	Z(-40°C) / Z(+20°C)	12	8	5	4	3																					
Endurance 耐久性	When the capacitors are restored to 20°C after 1000 hours application of the rated voltage at 105°C, they meet the characteristics listed below. 在 105°C 环境中施加额定工作电压1000小时后，待电容器恢复至20°C时进行测量，电容器的特性符合下表要求。 <table><tr><td>Capacitance Change 静电容量变化率</td><td>Within ±25% of initial measured value 初始值的 ±25%以内</td></tr><tr><td>Dissipation Factor 损耗角正切</td><td>200% of initial specified value 不大于规范值的200%</td></tr><tr><td>Leakage Current 漏电流</td><td>initial specified value 不大于规范值</td></tr></table>							Capacitance Change 静电容量变化率	Within ±25% of initial measured value 初始值的 ±25%以内	Dissipation Factor 损耗角正切	200% of initial specified value 不大于规范值的200%	Leakage Current 漏电流	initial specified value 不大于规范值														
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Leakage Current 漏电流	initial specified value 不大于规范值																										
Shelf Life 高温贮存特性	When the capacitors are restored to 20°C after leaving under no load at 105°C for 1000 hours, they meet the specified value for endurance characteristics listed above. 在 105°C 环境中无负荷放置2000小时后，待电容器恢复至20°C时进行测量，电容器的特性符合耐久性特性中所列的规定值。																										
Marking 标识	Printed with white colour on black sleeve (PVC) or printed with white colour on green and brown (3 5) sleeve (PET). 黑色胶管白字印刷 (PVC) 或绿色和褐色 (3 5) 胶管白字印刷 (PET)。																										

DRAWING & DIMENSIONS 外形图及尺寸 (Unit: mm)



D	3	4	5	6.3	8
P	1.0	1.5	2.0	2.5	3.5
d	0.45				
	1.0				

Note: All design and specifications are for reference only and is subject to change without prior notice. If any doubt about safety for your application, please contact us immediately for technical assistance before purchase.
注：以上所提供的设计及特性参数仅供参考，任何修改不作预先通知。如果在使用上有疑问，请在采购前与我们联系，以便提供技术上的协助。

SS Series

DIMENSIONS & STANDARD RATINGS 规格尺寸及标准参数

F	WV Code 代码	4		6.3		10		16		25		35		50	
		0G		0J		1A		1C		1E		1V		1H	
0.1	0R1													3 x 5 (4 x 5)	2.0 (2.4)
0.22	R22													3 x 5 (4 x 5)	3.0 (3.6)
0.33	R33													3 x 5 (4 x 5)	3.7 (4.4)
0.47	R47													3 x 5 (4 x 5)	4.4 (5.2)
0.68	R68													3 x 5 (4 x 5)	5.3 (6.3)
1	010													3 x 5 (4 x 5)	6.4 (7.7)
2.2	2R2													3 x 5 (4 x 5)	9.5 (11)
3.3	3R3											3 x 5 (4 x 5)	9 (11)	4 x 5	14
4.7	4R7									3 x 5 (4 x 5)	10 (12)	4 x 5	13	4 x 5 (5 x 5)	16 (19)
6.8	6R8					3 x 5	11	3 x 5	14	4 x 5	15	4 x 5	17	5 x 5	23
10	100			3 x 5 (4 x 5)	13 (15)	3 x 5 (4 x 5)	14 (17)	3 x 5 (4 x 5)	16 (16)	4 x 5	19	5 x 5	22	5 x 5 (6.3 x 5)	28 (33)
22	220	3 x 5 (4 x 5)	16 (16)	3 x 5 (4 x 5)	18 (19)	3 x 5 (4 x 5)	20 (22)	4 x 5	29	5 x 5	34	5 x 5	36	6.3 x 5	40
33	330	4 x 5	20	4 x 5	23	4 x 5	29	5 x 5	37	5 x 5	45	6.3 x 5	50	8 x 5	58
47	470	4 x 5	24	4 x 5	28	5 x 5	35	5 x 5 (6.3 x 5)	46 (49)	6.3 x 5	54	6.3 x 5	62	8 x 5	71
68	680	5 x 5	36	5 x 5	46	5 x 5	47	6.3 x 5	52	6.3 x 5	63	8 x 5	105		
100	101	5 x 5	41	5 x 5	50	5 x 5 (6.3 x 5)	50 (52)	6.3 x 5 (8 x 5)	58 (72)	8 x 5	90				
220	221	6.3 x 5	56	6.3 x 5	60	6.3 x 5 (8 x 5)	65 (78)	8 x 5	86						
330	331	8 x 5	80	8 x 5	86	8 x 5	90							Case size 尺寸	Ripple current 纹波电流
470	471	8 x 5	88	8 x 5	96										

Case size D L(mm), ripple current (mA rms) at 105 °C, 120Hz 尺寸 D L(mm), 纹波电流(mA rms)于 105 °C, 120Hz

Please refer to page 21 "Taping Specifications" & page 23 "Lead Forming & Cutting" about the taped or formed product spec. 编带与引线成型标准请查阅第21页“编带标准”及第23页“引线成型与剪脚”。
Please refer to page 22 "Packaging Specifications" for the minimum package quantity. 最小包装数量请查阅第22页“包装标准”。
Please refer to page 18 for the Part Number System. 产品编码规则请查阅第18页。