

# ZS

## 特点 Features

- 保证105°C 1000小时。Endurance : 1000h at 105°C.
- 额定电压范围：6.3~50V。Rated Voltage Range : 6.3~50V.
- 低高度 7(9)mm L。Low Profile 7(9)mm L.
- 满足RoHS。RoHS Compliant.



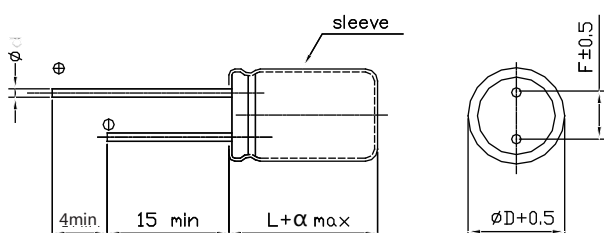
## 主要技术性能 Specifications

项目 Item	特性 Performance Characteristics							
类别温度范围 Category Temperature Range	-40~+105°C							
额定电压范围 Rated Voltage Range (U <sub>R</sub> )	6.3~50V							
标称电容范围 Rated Capacitance Range(C <sub>R</sub> )	2.2~560μF						120Hz, +20°C	
标称电容允许偏差 Rated Capacitance Tolerance(C <sub>T</sub> )	±20%(M)						120Hz, +20°C	
漏电流 Leakage Current(I <sub>L</sub> )	≤0.01C <sub>R</sub> U <sub>R</sub> 或者3μA 取较大值 ( Whichever is greater )						+20°C after 2 minutes	
损耗角正切值 Tangent of loss angle(Tanδ)	U <sub>R</sub> (V)	6.3	10	16	25	35	50	Max. 120Hz, +20°C
	Tanδ	0.18	0.16	0.14	0.12	0.10	0.10	
低温特性 Characteristics at low temperature	U <sub>R</sub> (V)	6.3	10	16	25	35	50	Max. 120Hz
	Z <sub>-25°C</sub> / Z <sub>+20°C</sub>	2	2	2	2	2	2	
	Z <sub>-40°C</sub> / Z <sub>+20°C</sub>	10	8	8	6	5	3	
耐久性 Load life	+105°C, 不超过额定电压的范围下叠加额定纹波电流, 连续加载额定电压1000小时, 恢复16小时后: Overlay the rated ripple current within the range of rated voltage and continuously load the rated voltage for 1000 hours+105°C, and recover for 16 hours: 电容变化率Capacitance change : ±25%初始测量值以内 within ±25% of initial value 损耗角正切值 Tanδ : ≤2倍初始规定值 Not more than 200% of specified value 漏电流 Leakage current : ≤初始规定值 Not more than specified value							
高温贮存 Shelf life	+105°C,1000小时贮存后,恢复16小时后: After storage for 1000 hours at +105°C and then recovery 16 hours: 电容变化率Capacitance change : ±25%初始测量值以内 within ±25% of initial value 损耗角正切值 Tanδ : ≤2倍初始规定值 Not more than 200% of specified value 漏电流 Leakage current : ≤2倍初始规定值 Not more than 200% of specified value							

## 频率修正系数 Frequency Coefficient

Frequency (Hz)	Kf			
	120	1K	10K	100K
~180	0.4	0.75	0.90	1
220~560	0.5	0.85	0.94	1

## 尺寸图 Dimension drawings



单位 Unit: mm

	4	5	6.3	8
D	4	5	6.3	8
F	1.5	2.0	2.5	3.5
d	0.45		0.5	
α(max)	L < 9, α=1; L=9, α=1.5			
β(max)	0.5			

规格特性表  
Table of specifications and characteristics

U <sub>R</sub> (V) C <sub>R</sub> (μF)	6.3			10			16		
	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 105°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 105°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 105°C mA
15							4×7	3.3	70
22				4×7	3.3	70	5×7	1.7	120
33	5×7	1.7	120	5×7	1.7	120	6.3×7	0.8	220
47	5×7	1.7	140	5×7	0.8	165	6.3×7	0.8	220
68	6.3×7	0.8	210	6.3×7	0.8	210	6.3×7	0.5	220
100	6.3×7	0.8	220	6.3×7	0.5	220	6.3×7	0.5	235
							8×7	0.5	345
150	6.3×7	0.5	220	6.3×7	0.5	220	6.3×7	0.5	235
220	8×7	0.5	345	6.3×7	0.5	240	8×7	0.45	360
				8×7	0.5	345	6.3×7	0.45	260
330	8×7	0.4	360	8×7	0.4	360	8×9	0.38	380
470	8×7	0.4	380	8×7	0.35	380	8×9	0.35	420
560	8×9	0.35	380	8×9	0.30	380			

U <sub>R</sub> (V) C <sub>R</sub> (μF)	25			35			50		
	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 105°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 105°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 105°C mA
2.2							5×7	1.0	120
6.8				4×7	3.3	70			
10	4×7	3.3	70	4×7	1.8	70	5×7	1.0	120
	5×7	2.8	90	5×7	1.7	120			
15	5×7	1.7	120	6.3×7	0.8	220	6.3×7	0.8	220
22	5×7	1.7	120	6.3×7	0.8	220	6.3×7	0.75	220
33	6.3×7	0.8	210	6.3×7	0.5	220	8×7	0.70	320
47	6.3×7	0.5	220	6.3×7	0.48	220	8×7	0.68	345
68	6.3×7	0.5	220	8×7	0.45	310	8×7	0.65	345
100	6.3×7	0.5	300	8×7	0.40	345			
150	8×7	0.38	360						
220	8×9	0.40	380						

ALUMINIUM ELECTROLYTIC CAPACITORS

SMD

MINIATURE

BI-POLAR

STANDARD

LOW-ESR

HIGH RELIABILITY

SNAP-IN

SCREW