

E2 Series

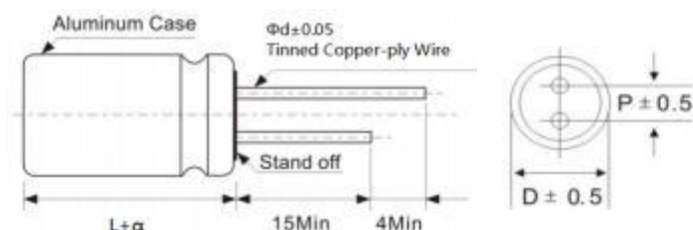
- Low ESR, high ripple current
- Load life of 2000 hours at 105°C
- RoHS Compliant

◆ 规格表 Specifications



项目Items	特性参数Characteristics											
使用温度范围 Category Temperature Range	-55 ~ +105℃											
额定工作电压范围 Rated Voltage Range	2.5 ~ 25V											
静电容量允许偏差 Capacitance tolerance	±20%(M) (at 20℃,120Hz)											
漏电流 Leakage Current	施加额定工作电压2分钟后读数, 小于或等于规格值 (at 20℃) I≤0.2CV 或500μA (取大值) Less than or equal to the specified value. After 2 minutes application of rated Voltage at 20℃											
损耗角正切值tanδ Dissipation Factor	Rated voltage (V)	2.5	4	6.3	6.8	7.5	10	12	16	20	25	(at 20℃,120Hz)
	tanδ (Max.)	0.08					0.12					
温度特性 Low Temperture Characteristics (Max.Impedance Ratio)	Z(-25℃)/Z(+20℃)	≤ 1.25					(100KHz)					
	Z(-55℃)/Z(+20℃)	≤ 1.25										
耐久性 Endurance	105℃施加额定工作电压2000小时, 恢复到20℃后, 产品性能应满足以下要求 The specifications listed below shall be satisfied when the capacitors are restored to 20℃ after application of rated voltage for 2000 hours at 105℃.											
	Appearance	No significant damage										
	Capacitance change	≤ ±20% of the initial value										
	D.F.(tanδ)	≤ 150% of the specified value										
	ESR	≤ 150% of the specified value										
	Leakage current	≤ The specified value										
耐湿负荷特性 Damp Heat (Steady State)	在60℃ 温度, 湿度90%~95%RH的环境中, 施加额定电压1000小时后, 恢复到20℃后, 产品性能应满足以下要求 The specifications listed below shall be satisfied when the capacitors are restored to 20℃after application of rated voltage for 1000 hours at 60℃,90%~ 95% RH.											
	Appearance	No significant damage										
	Capacitance change	≤ ±20% of the initial value										
	D.F.(tanδ)	≤ 150% of the specified value										
	ESR	≤ 150% of the specified value										
	Leakage current	≤ The specified value										
浪涌电压特性 (Surge Voltage)	浪涌电压=额定电压× 1.15(V) Surge Voltage=Rated voltage × 1.15(V) 在105℃环境中, 按充电30秒; 放电5分30秒, 连续施加浪涌电压1000次(Rc=1kΩ), 待恢复后测试, 应满足以下要求 The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltages specified at 105℃ for 30 seconds through a protective resistor (Rc=1kΩ) and discharge for 5 minutes 30 seconds											
	Appearance	No significant damage										
	Capacitance change	≤ ±20% of the initial value										
	D.F.(tanδ)	≤ 150% of the specified value										
	ESR	≤ 150% of the specified value										
	Leakage current	≤ The specified value										

◆ 外形图 Dimensions (mm)

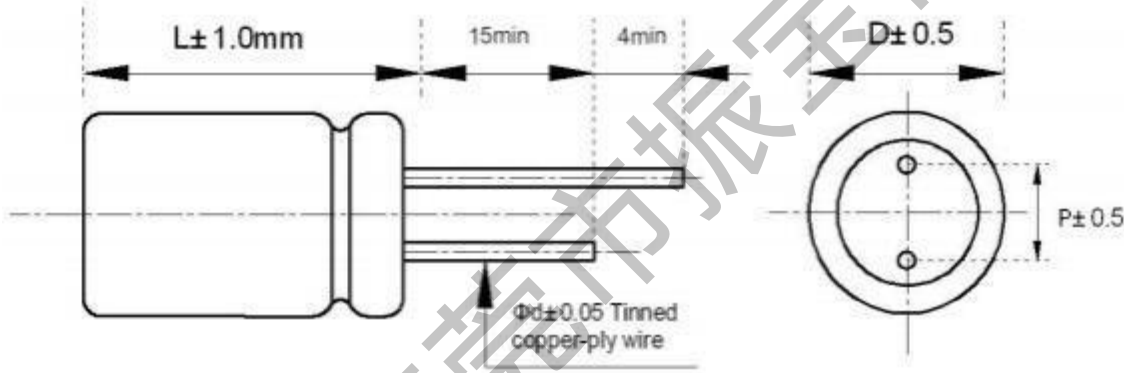


ΦD	5	6.3	8	10
P	2.0	2.5	3.5	5.0
Φd	0.5	0.6	0.6	0.6

α	(L < 16)1.0
	(16 ≤ L < 22)1.5
	(L ≥ 22)2.0

基本特性参数表 Characteristics

Part No/ Ruilong	Capacitance. (uF) 120Hz/+20℃	Capacitance Tolerance. (%) 120Hz/+20℃	Rated Voltage (VDC)	Surge Voltage (VDC)	tanδ 120Hz/+ 20℃	Leakage Current 2 min(uA) +20℃	ESR 100KHz +20℃ (mΩ)	Ripple Current. 10 0KHz (mArms)	Load Life (Hrs)	Categoty Temperture Range	Dimensions(mm)		Colour
											ΦD	L	
E2821M2R5D090RL	820	±20	2.5	2.9	0.08	500	12	5200	2000	-55~+105℃	8	9	红色



◆ 纹波电流修正系数 Rated Ripple Current Coefficient

频率 Frequency(Hz)	$120\text{Hz} \leq F < 1\text{KHz}$	$1\text{KHz} \leq F < 10\text{KHz}$	$10\text{KHz} \leq F < 100\text{KHz}$	$100\text{KHz} \leq F < 500\text{KHz}$
系数 Case code	0.05	0.30	0.70	1.00