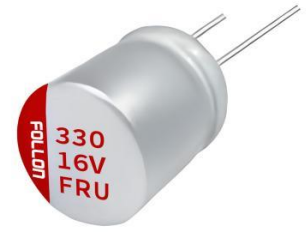# FRU Series

FOLLON ELECTRONICS

- 125℃ 1000~2000hours assured
  125℃ 1000~2000小时寿命保证

- Ultra low ESR with large permissible ripple current
  极低等效串联电阻(ESR)并可承受大纹波电流

- RoHS compliance 符合RoHS指令

Specifications 特性表

Items 项目	Characteristics 主要特性
Operation Temperature Range 使用温度范围	−55℃~125℃
Voltage Range 额定电压范围	2.5~20V
Capacitance Range 额定容量范围	100~1200
Capacitance Tolerance 额定容量容许差值	±20% at 120Hz, 20℃
Dissipation Factor (Tanδ)损失角	Standard Ratings 标准品一览表
ESR 等效串联电阻（ESR）	Standard Ratings 标准品一览表
Leakage Current 漏电流	Standard Ratings 标准品一览表
Endurance 耐久性	After2000Hrs. （1000Hrs for 2.5~4V) Application of the rated voltage at 105℃,returned to 20℃ for testing, they meet the characteristics listed below. 在105℃ 下连续施加额定电压2000小时(2.5~4V为1000小时) 后，返回20℃进行测试时，满足以下项目
	Capacitance Change 静电容量变化率 / Within ±20% of initial value ≤初始值的±20% ; Tanδ 损失角 / Less than 150% of specified value ≤初始值的150% ; ESR 等效串联电阻 / Less than 150% of specified value ≤初始值的150% ; Leakage Current漏电流 / Within specified value ≤初始规格值
Moisture Resistance 耐湿无负荷	After 1000 hours in an environment of 60℃，90~95% humidity, return to 20℃ for testing. they meet the characteristics listed below. 在60℃，湿度90~95%环境中1000H后，返回20℃进行测试，需满足以下项目
	Capacitance Change 静电容量变化率 / Within ±20% of initial value ≤初始值的±20% ; Tanδ 损失角 / Less than 150% of specified value ≤初始值的150% ; ESR 等效串联电阻 / Less than 150% of specified value ≤初始值的150% ; Leakage Current漏电流 / Within specified value ≤初始规格值
Marking 标识	Red print on the case top. 铝壳顶部红色印刷。

■ DRAWING (Unit: mm) 外形图

负极标识 — 标称容量 330 / 额定电压 16V / 系列名称 FRU

L+α 最大值 / φd / φD+β 最大值 / 15 最小值 / 4 最小值 / P±0.5
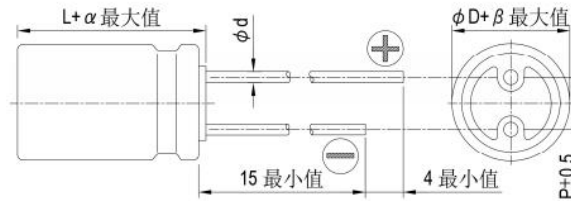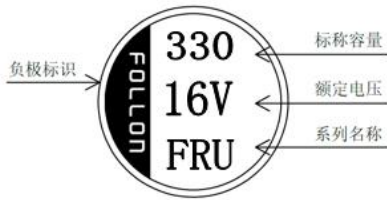
□ DIMENSIONS (Unit:mm)尺寸表

单位：mm

尺寸	8X11.5	10X12
ΦD	8	10
L	11.5	12
P	3.5	5.0
Φd	0.6	0.6
α	1.0	1.0
β	0.5	0.5

FOLLON ELECTRONICS
FRU Series

Speifications 标准品一览表

Rated Volt.(V)	Surge Voltage(V)	Capacitance(μF)	Size ΦDXL (mm)	Tan δ 120Hz, 20℃	LC(μA) 2minutes	ESR (mΩ) 20℃ 100KHZ	Rated R.C (mA/rms at 100KHz,105℃)
2.5V(0E)	2.8	680	8X11.5	0.18	340	13	1,430
		1,200	10X12	0.18	600	13	1,721
4V(0G)	4.6	560	8X11.5	0.18	448	13	1,430
		1,200	10X12	0.18	960	12	1,721
6.3V(0J)	7.2	470	8X11.5	0.15	592	15	1,332
		820	10X12	0.15	1,033	12	1,721
10V(1A)	12.0	330	8X11.5	0.12	660	16	1,250
		560	10X12	0.12	1,120	13	1,655
16V(1C)	18.0	180	8X11.5	0.12	576	18	1,151
		330	10X12	0.12	1,056	16	1,493
20V(1D)	23.0	100	8X11.5	0.15	400	24	1,050
		150	10X12	0.15	600	20	1,367

●**Case size** ΦD XL(mm),ripple current (mA rms) at 105℃,100KHz　●尺寸ΦD XL(mm)，纹波电流（mA rms）于105℃,100KHz

□Ripple Current and Frequency Multipliers 纹波电流与频率补正系数

Frequeny 频率	120HZ	1KHZ	10KHZ	100KHZ~
Multipliers 补正系数	0.05	0.30	0.70	1.00

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谨供参考，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.

FRU