

STANDARD

标准品

- New
新品

105°C 2000hours assured
105°C 2000H 寿命保证
- Ultra low ESR,solid capacitors of SMD type
极低等效串联电阻(ESR)，贴片型固态电容器
- 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℃~105℃								
Voltage Range 额定电压范围	2.5~35V								
Capacitance Range 额定容量范围	6.8~1500								
Capacitance Tolerance 额定容量容许误差值	±20% at 120Hz, 20℃								
Dissipation Factor (Tan δ) 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	After 2000Hrs. 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小时后，返回20℃进行测试时，满足以下项目 <table><tr><td>Capacitance Change 静电容量变化率</td><td>Within ±20% of initial value ≤初始值的±20%</td></tr><tr><td>Tan δ 损失角</td><td>Less than 150% of specified value ≤初始值的150%</td></tr><tr><td>ESR 等效串联电阻</td><td>Less than 150% of specified value ≤初始值的150%</td></tr><tr><td>Leakage Current漏电流</td><td>Within specified value ≤初始规格值</td></tr></table>	Capacitance Change 静电容量变化率	Within ±20% of initial value ≤初始值的±20%	Tan δ 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
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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 <table><tr><td>Capacitance Change 静电容量变化率</td><td>Within ±20% of initial value ≤初始值的±20%</td></tr><tr><td>Tan δ 损失角</td><td>Less than 150% of specified value ≤初始值的150%</td></tr><tr><td>ESR 等效串联电阻</td><td>Less than 150% of specified value ≤初始值的150%</td></tr><tr><td>Leakage Current漏电流</td><td>Within specified value ≤初始规格值</td></tr></table>	Capacitance Change 静电容量变化率	Within ±20% of initial value ≤初始值的±20%	Tan δ 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
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Leakage Current漏电流	Within specified value ≤初始规格值								
Resistance to Soldering Heat 焊锡耐热性	After reflow soldering and restored at room temperature, they meet the characteristics listed below. 经过回流焊并冷却至室温后，电容器的特性符合下表的要求。 <table><tr><td>Capacitance Change 静电容量变化率</td><td>Within ±10% of initial value ≤初始值的±10%</td></tr><tr><td>Tan δ 损失角</td><td>Less than 130% of specified value ≤初始值的130%</td></tr><tr><td>ESR 等效串联电阻</td><td>Less than 130% of specified value ≤初始值的130%</td></tr><tr><td>Leakage Current漏电流</td><td>Within specified value ≤初始规格值</td></tr></table>	Capacitance Change 静电容量变化率	Within ±10% of initial value ≤初始值的±10%	Tan δ 损失角	Less than 130% of specified value ≤初始值的130%	ESR 等效串联电阻	Less than 130% of specified value ≤初始值的130%	Leakage Current漏电流	Within specified value ≤初始规格值
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ESR 等效串联电阻	Less than 130% of specified value ≤初始值的130%								
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

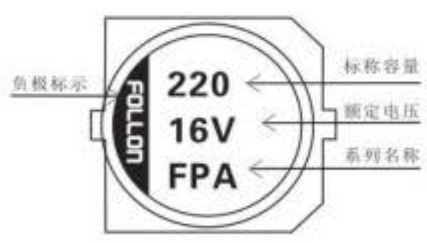
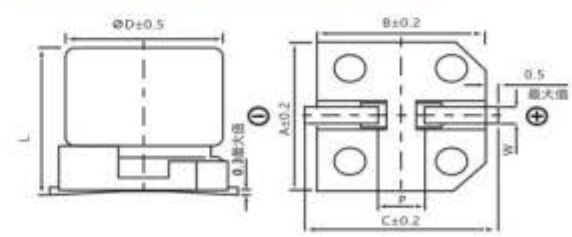


Diagram of Dimensions 尺寸图



DIMENSIONS (Unit: mm) 尺寸表

尺寸	5X5.8	6.3X6.0	6.3X7.0	8X7	8X12	10X7.7	10X10	10X12.6
ΦD	5.0	6.3	6.3	8.0	8.0	10.0	10.0	10.0
L	5.8 ±0.3	6.0+0.1/-0.3	7.0 ±0.3	6.9+0.1/-0.4	12 ±0.5	7.7 ±0.3	9.9+0.1/-0.4	12.6+0.1/-0.4
A	5.3	6.6	6.6	8.3	8.3	10.3	10.3	10.3
B	5.3	6.6	6.6	8.3	8.3	10.3	10.3	10.3
C	5.9	7.2	7.2	9.0	9.0	11.0	11.0	11.0
P±0.2	1.5	2.0	2.0	3.1	3.1	4.6	4.6	4.6
W	0.5~0.8	0.5~0.8	0.5~0.8	0.7~1.1	0.7~1.1	0.7~1.3	0.7~1.3	0.7~1.3

Speifications 标准品一览表

Rated Volt.(V)	Surge Voltage(V)	Capacitance(μF)	Size Φ DXL (mm)	Tan δ 120Hz, 20℃	LC(μ A) 2minutes	ESR (mΩ) 20℃ 100KHZ	Rated R.C (mA/rms at 100KHz,105℃)
2.5V(0E)	2.8	220	6.3X6.0	0.12	120	25	2,450
		560	8X7	0.12	280	23	3,050
		680	8X12	0.12	340	12	4,750
		1,000	10X7.7	0.12	500	19	4,720
		1,200	10X10	0.18	750	13	5,150
		1,500	10X12.6	0.18	750	10	5,540
4V(0G)	4.6	150	5X5.8	0.12	120	30	1,450
			6.3X6.0	0.12	120	26	2,440
		220	8X7.0	0.12	176	25	3,010
		330	8X7.0	0.12	264	25	3,010
		470	10X7.7	0.12	376	20	4,120
		560	8X12	0.18	448	12	4,730
		680	10X7.7	0.12	544	20	4,120
		820	10X10	0.18	656	13	5,180
		1,200	10X12.6	0.18	960	10	5,480
6.3V(0J)	7.2	82	6.3X6.0	0.12	103	27	2,400
		100	5X5.8	0.12	126	35	1,380
			6.3X6.0	0.12	126	27	2,400
		120	6.3X7.0	0.12	151	30	2,010
		150	6.3X7.0	0.12	189	30	2,250
			8X7.0	0.12	189	25	3,020
		220	6.3X7	0.12	277	30	2,250
			8X7.0	0.12	277	25	3,020
		330	10X7.7	0.12	416	20	4,130
		470	8X12	0.15	592	12	4,770
		560	10X10	0.15	706	16	4,700
10V(1A)	12.0	820	10X12.6	0.15	1,033	10	5,500
		47	5X5.8	0.12	94	40	1,270
		56	6.3X6.0	0.10	112	31	2,250
		150	8X7.0	0.10	300	27	2,800
		330	8X12	0.15	660	14	4,420
			10X7.7	0.10	660	24	3,770
		470	10X9.9	0.15	940	18	4,400
16V(1V)	18.0	560	10X12.6	0.15	1,120	12	5,300
		22	5X5.8	0.12	70	45	1,210
		47	6.3X6.0	0.10	150	50	1,650
		82	8X7.0	0.10	262	30	2,700
		180	8X12	0.15	576	16	4,360
			10X7.7	0.10	576	26	3,430
		220	10X10	0.15	704	20	4,200
		330	10X12.6	0.15	792	14	5,050
		820	10X12.6	0.12	2,624	18	4,200

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

Speifications 标准品一览表

Rated Volt.(V)	Surge Voltage(V)	Capacitance(μF)	Size ΦDXL(mm)	Tanδ 120Hz, 20℃	LC(μA) 2minutes	ESR (m Ω) 20℃ 100KHZ	Rated R.C (mA/rms at 100KHz,105℃)
20V(1D)	23.0	22	6.3X6.0	0.10	88	50	1,650
		47	8X7.0	0.10	188	45	2,000
		82	10X7.7	0.10	328	40	2,500
		100	8X12	0.15	400	24	3,320
			10X10	0.15	400	25	3,700
		150	10X12.6	0.15	600	20	4,320
		330	10X12.6	0.12	1,320	26	2,700
25V(1E)	29.0	6.8	6.3X6.0	0.10	170	80	1,200
		10	8X7.0	0.10	125	60	1,500
		22	10X7.7	0.10	275	50	2,000
		33	8X12	0.12	413	30	2,980
		56	10X12.6	0.12	700	28	3,800
		270	10X12.6	0.12	1,350	27	2,700
		39	8X12	0.12	273	31	2,100
35V(1V)	40.0	68	10X12.6	0.12	476	28	2,700

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

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

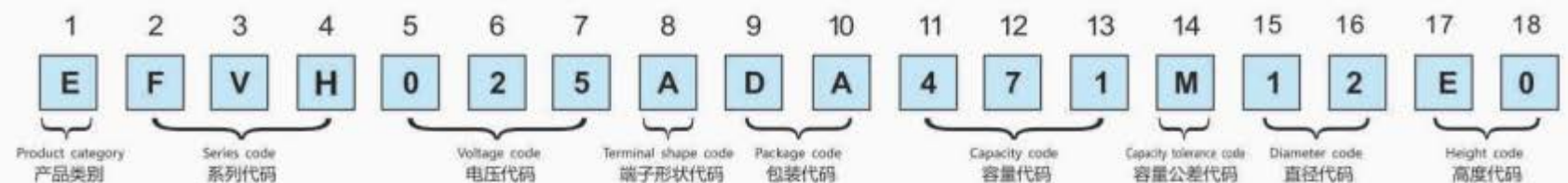
Frequency 频率	120HZ	1KHZ	10KHZ	100KHZ-
Multipliers 补正系数	0.05	0.30	0.70	1.00

- Taping specifications are given in page 17 "Taping Specifications". 编带标准请参阅第 17 页 “编带标准” 。
- Please refer to page 18 "Package Quantity" for the minimum package quantity. 最小包装数量请参阅第 18 页 “包装数量” 。

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 pu rchase

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

SMD EXPLANATION OF PART NUMBERS



(2、3、4)

Series 系列	Voltage (w.v) 电压	Code 代码
FVE	4	4R0
FVH	6.3	6R3
FVA	10	010
FVZ	16	016
FVR	25	025
FVL	35	035
FVM	50	050
FVU	63	063
FVG	100	100
FVB	160	160
FVN	250	250
FVD	350	350
FVC	400	400

(5、6、7)

Capacitance (uF) 静电容量	Code 代码
0.1	0R1
0.22	R22
1	010
4.7	4R7
10	100
47	470
100	101
470	471
1000	102
4700	472
10000	103

(11、12、13)

Cap.Tolerance (%) 容量允许	Code 代码
± 10	K
± 20	M

(14)

Capacitance (uF) 静电容量	Code 代码
0.1	0R1
0.22	R22
1	010
4.7	4R7
10	100
47	470
100	101
470	471
1000	102
4700	472
10000	103

(8)

Tape 端子类型	Code 代码
No dummy terminal 无辅助端子	A
With dummy terminal 有辅助端子	G

(9、10)

Packaging 包装要求		External diameter 纸盘外径	Fit size 适合尺寸	Code 代码
		□(mm)	□D(mm)	
Braiding 编带	Paper tray 纸盘	380	ØD4~18	DA
		330	ØD4~18	DB
	Glue tray 胶盘	380	ØD4~10	RA
	Blister box 吸塑盒	-	ØD12.5~18	TR

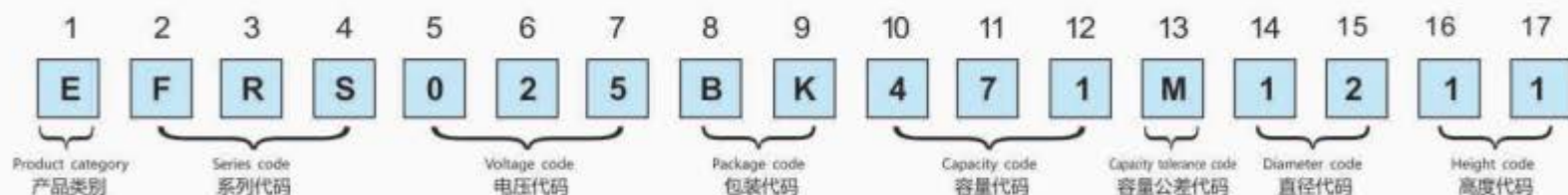
(15、16)

Diameter (mm) 直径	Code 代码
4	04
5	05
6.3	06
8	08
10	10
12.5	12
16	16
18	18

(17、18)

Length (mm) 高度	Code 代码
5.4	54
5.8	58
6.5	65
7.7	77
10.2	A0
10.5	B0
13.5	E0
16	G5
16.5	H0
21.5	N0

Radial EXPLANATION OF PART NUMBERS 插件产品编码规则

[illegible]