



双电层电容器

ELECTRIC DOUBLE LAYER CAPACITORS

FMR

FMR

系列
SERIES

- Double cells in series 串联双电极模组
- Lower ESR 低内阻
- Long lifetime with over 500,000 duty cycles 高达 500,000 次循环寿命
- Used in Vehicle data recorder, Intelligent instrument,
Vacuum switch,Digital camera,Motor drive,Clock circuit,UPS,Toy,RAM
汽车记录仪、智能仪表、真空开关、数码相机、马达驱动、时钟电路、UPS、玩具、RAM
- 65°C 1500hours



SPECIFICATIONS 性能要求

Item 项目	Performance Characteristics 使用特性	
Operating Temperature Range 工作温度范围	-40°C ~ +65°C (85°C)	
Rated Voltage 额定电压	5.4 V.DC (5.0V.DC)	
Surge Voltage 波涌电压	5.7 V.DC	
Capacitance Tolerance 容量偏差	-20%~+50%	
DC Leakage Current 漏电流(72h)	After 72 hours application of rated voltage at +25°C 在+25°C下施加额定电压 72 小时后	
Characteristics at High and Low Temperatures 高温及低温特性	Capacitance range 容量偏差	Within ±30% of the initial value. ΔC≤初始测量值的 30%
	ESR range 电阻偏差	Less than 200% of the initial value. ΔESR≤初始测量值的 200%
Shelf Life 贮存寿命	The specifications shall be met after storage at upper category temperature for 1500 hours 工作温度上限下无负荷贮存 1500 小时后电容器符合以下的限值	
	Capacitance range 容量偏差	Within ±30% of the initial value. ΔC≤初始测量值的 30%
	ESR range 电阻偏差	Less than 200% of the initial value. ΔESR≤初始测量值的 200%
High Temperature Loaded 耐久性测试	The specifications shall be met after rated voltage applied at upper category temperature for 1500 hours 工作温度上限下负载额定电压 1500 小时后电容器符合以下的限值	
	Capacitance range 容量偏差	Within ±30% of the initial value. ΔC≤初始测量值的 30%
	ESR range 电阻偏差	Less than 200% of the initial value. ΔESR≤初始测量值的 200%
Cycle Life 循环寿命	The specifications shall be met after 500,000 cycles at 25°C, cycle of charge/discharge from V _R to 1/2V _R +25°C下以恒定电流使电容器在额定电压和半额定电压之间循环充放电 500,000 次	
	Capacitance range 容量偏差	Within ±30% of the initial value. ΔC≤初始测量值的 30%
	ESR range 电阻偏差	Less than 200% of the initial value. ΔESR≤初始测量值的 200%



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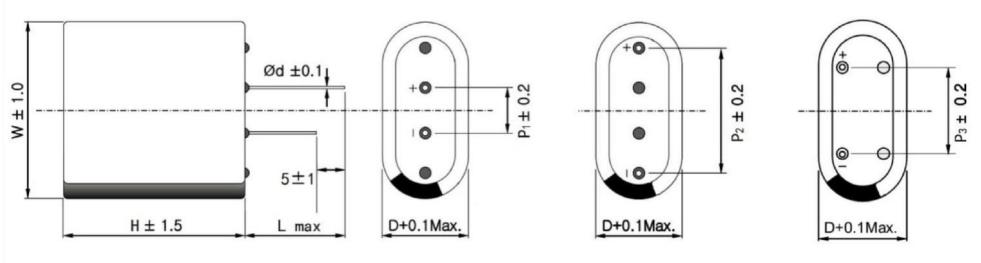
FMR

Part Number 产品型号体系表

EC	FMR	□ R □	□ □ □	□	□ □ □ □ □ □
EDLC 双电层电容器	Series 系列代码	Rated Voltage 额定电压	Rated Capacitance 额定容量	Capacitance Tolerance 容量偏差	Dimension Code 尺寸代码

※ 容量偏差 (Capacitance Tolerance) □: M:±20%; Q:-10%~+30%; V:-10%~+20%; S:-20%~+50%; A:0%~+20%

Dimensions (mm) 尺寸



D	8	10	12.5
P	4.7/12.0/8.5	5.5/15.0/10.5	7.5/18.0/13.0
d	0.6	0.6	0.6

Standard size 标准品一览表

Rated Voltage 额定电压 (V.DC)	Rated Capacitance 额定容量(F)	ESR(mΩ)		Leakage Current 漏电流 (μA/ 72hours)	ΦD×W×H (mm)	Part No. 编号
		AC (1kHz)	DC			
5.4	0.5	180	360	5	8.5×17×15	ECFMR5R4504S081715
	1.5	90	180	8	8.5×17×23	ECFMR5R4155S081723
	2.5	60	120	10	8.5×17×23	ECFMR5R4255S081723
	4.0	50	100	15	11×21×23	ECFMR5R4405S112123
	5.0	45	90	20	11×21×27	ECFMR5R4505S112127
	7.5	36	72	25	13×26×28	ECFMR5R4755S132628