

模组系列 Module series



产品特点 / Features

- 高输出功率
- 具有限压保护模块
- 宽工作温度范围：(-40℃~+65℃)
- 免维护功能（循环次数可达50万次）
- 环保
- High output power
- With voltage limiting protection module
- Wide operating temperature range (-40℃~+65℃)
- Maintenance Free (Cycle times up to 500 thousand times)
- Environmental Friendly

应用 / Applications

- 智能三表
- 电机启动
- 太阳能 / 风能
- 后备电源
- 电力系统
- Intelligent Three-ammeters
- Motor drive
- Solar/Wind energy
- Memory Back up Batteries
- Electric system

MANUALS FOR VARIOUS TYPES OF SELECTION

BIGCAP各系列产品选型手册

BCE 系列 BCE series

产品特点 / Features

- V、H、C型多种结构，安装时可选择；
V, H, C a variety of structure, can choose when to install;
- 符合ROHS标准，无Cd、Pb等污染物质；
Comply with ROHS standards no Cd Pb and other pollutants;
- 充放电循环寿命长；
Long charge-discharge cycle life;
- 漏电流低，适合时钟芯片数据保持。
Ultra-low leakage current, suitable for keeping the clock chip data.



应用 / Applications

- 工作电流 $\mu A \sim 10mA$ ，工作时间秒级至几个月；
Working current from $\mu A \sim 10mA$, working hours microseconds to a few months;
- 可用于手摇手电筒、电表、时钟保持、家电控制器、玩具等。
Can be used for Hand-cranked flashlight, Electric meter, Water meter, Gas meter, The clock to keep, Electrical home appliances control, toys, etc.

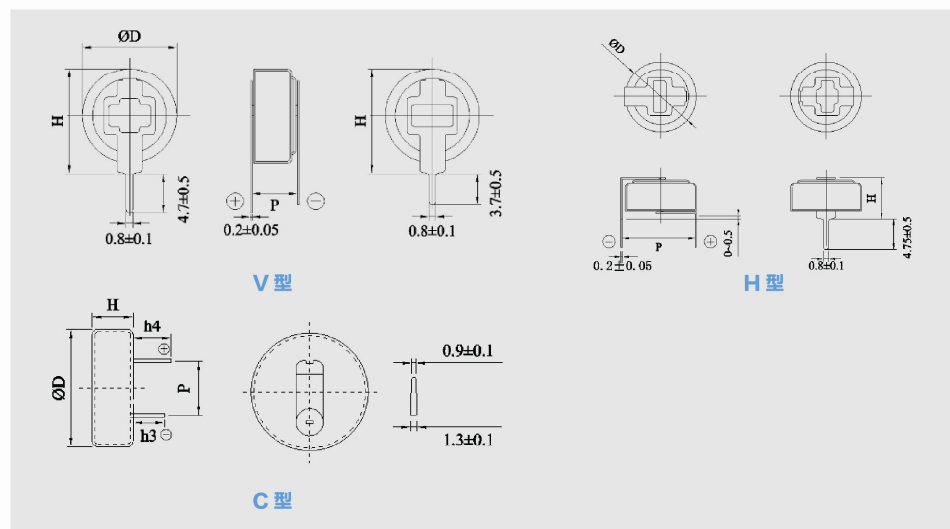
标准测试条件 / standard test conditions

- 在标准大气压，温度5~35℃，相对湿度小于85%条件下进行测试；本规格书标准测试条件为标准大气压，温度25℃，相对湿度小于60%。
Products are tested under normal pressure, the temperature range is from 5~35℃ and relative humidity is less than RH85%. The standard test conditions in this product specification are as follows: under normal pressure; the temperature at 25℃ and the relative humidity less than 60%

◎ 型号命名规则 / Part Number System

产品系列	额定电压	结构类型	容量	内部控制编码
- 卷绕PC系列-BRE - 卷绕AN系列-BRP - 纽扣PC常规-BCE - 纽扣4Φ小型-BCM - 纽扣高温系列85℃-BCT - 组合高温系列85℃-BMT - 组合PC系列-BME - 组合AN系列-BMP - 卷绕高比能量AN系列-BUP - 卷绕高温系列85℃-BRT	2.7V-002R7 2.8V-002R8 5.4V-005R4 5.5V-005R5 48-048R0 100-100R0 200-200R0	- 卷绕引线型-L - 卷绕盖板型-S/C - 卷绕螺纹型-W - 卷绕螺柱型-B - 卷绕多引出型-M - 纽扣立式-V - 纽扣卧式-H - 纽扣C型-C	0.047-473 0.1F-104 0.47F-474 1.0F-105 8.0F-805 10F-106 22F-226 100F-107 360F-367 400F-407 3000F-308	

◎ BIGCAP 标准产品外形尺寸图 / Shape of standard product



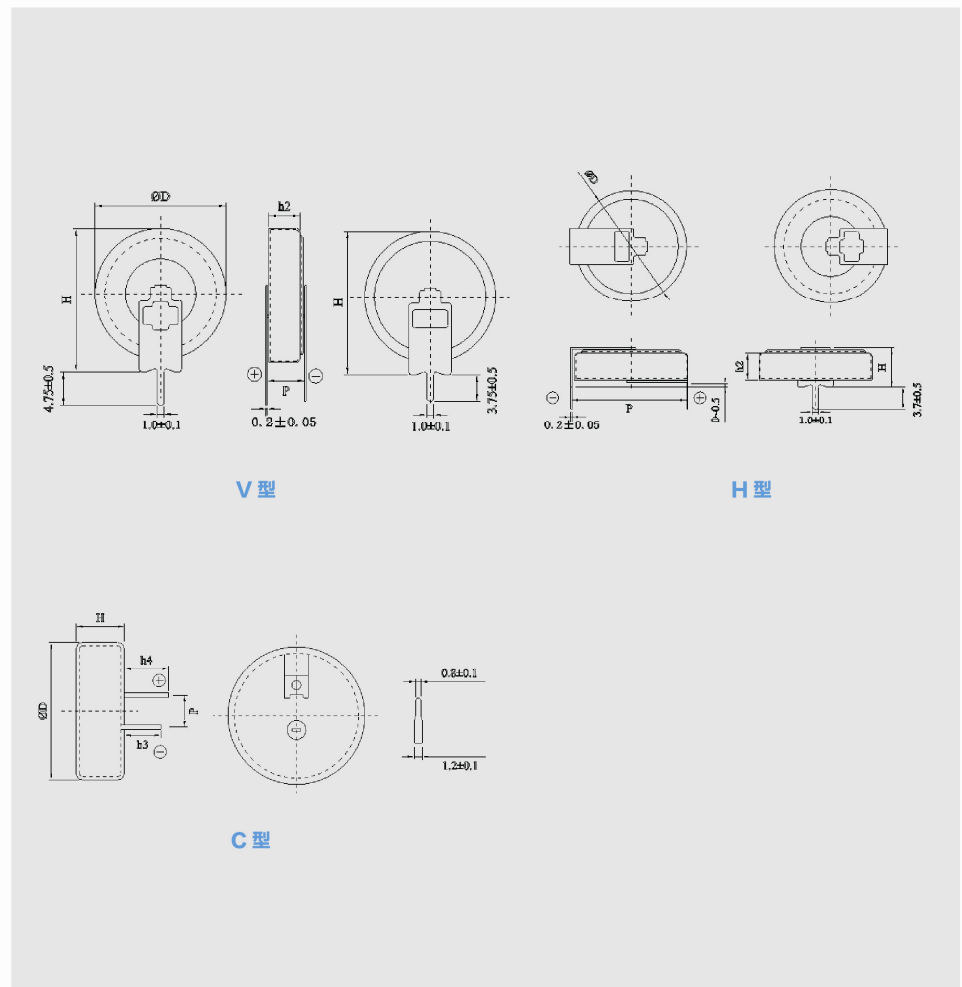
◎ BIGCAP标准产品规格 / Standard product specification

型号 Part Number	额定电压 Nominal Voltage ,V dc	容量 Capacitance F	容量允许偏差 Cap.olerance	内阻 ESR, mΩ		尺寸 Size, mm ΦD×H	质量 Weight g	体积 Volume ml
				AC@1kHz	DC			
BCE005R5C473FS	5.5	0.047	±20%	40	60	13.5×6.5	3.0	0.93
BCE005R5H473FS	5.5	0.047	±20%	40	60	11.5×6.0	1.4	0.62
BCE005R5V473FS	5.5	0.047	±20%	40	60	11.5×12.5	1.4	1.30
BCE005R5C104FS	5.5	0.10	±20%	40	60	13.5×6.6	3.0	0.94
BCE005R5H104FS	5.5	0.10	±20%	40	60	11.5×6.0	1.4	0.62
BCE005R5V104FS	5.5	0.10	±20%	40	60	11.5×12.5	1.4	1.30
BCE005R5C224FS	5.5	0.22	±20%	40	60	13.5×6.6	3.1	0.94
BCE005R5H224FS	5.5	0.22	±20%	40	60	11.5×6.0	1.5	0.62
BCE005R5V224FS	5.5	0.22	±20%	40	60	11.5×12.5	1.5	1.30
BCE005R5C334FAS	5.5	0.33	±20%	50	75	13.5×6.6	3.1	0.94
BCE005R5H334FAS	5.5	0.33	±20%	50	75	11.5×6.0	1.5	0.62
BCE005R5V334FAS	5.5	0.33	±20%	50	75	11.5×12.5	1.5	1.30
BCE005R5C334FBS	5.5	0.33	±20%	50	75	13.5×7.3	3.1	1.04
BCE005R5H334FBS	5.5	0.33	±20%	50	75	11.5×6.0	1.5	0.62
BCE005R5V334FBS	5.5	0.33	±20%	50	75	11.5×12.5	1.5	1.30
BCE005R5C474FS	5.5	0.47	±20%	40	60	13.5×7.3	3.2	1.04
BCE005R5H474FS	5.5	0.47	±20%	40	60	11.5×6.0	1.6	0.62
BCE005R5V474FS	5.5	0.47	±20%	40	60	11.5×12.5	1.6	1.30

◎ BIGCAP标准产品规格 / Standard product specification

型号 Part Number	存储能量 Max. Stored Energy, mWh	能量密度 Energy Density		功率密度 Power Density		额定电流 Nominal Current,A	最大电流 Max Current,A	72hLC Leakage Current at 72h (25℃),uA
		质量比 Wh/kg Gravimetric	体积比 Wh/L Volumetric	质量比 Wh/kg Gravimetric	体积比 Wh/L Volumetric			
BCE005R5C473FS	0.20	0.07	0.21	0.04	0.14	0.006	0.02	<1
BCE005R5H473FS	0.20	0.14	0.32	0.09	0.20	0.006	0.02	<1
BCE005R5V473FS	0.20	0.14	0.15	0.09	0.10	0.006	0.02	<1
BCE005R5C104FS	0.42	0.14	0.45	0.04	0.13	0.012	0.032	<1
BCE005R5H104FS	0.42	0.30	0.68	0.09	0.20	0.012	0.032	<1
BCE005R5V104FS	0.42	0.30	0.32	0.09	0.10	0.012	0.032	<1
BCE005R5C224FS	0.92	0.30	0.98	0.04	0.13	0.015	0.042	<1
BCE005R5H224FS	0.92	0.62	1.49	0.08	0.20	0.015	0.042	<1
BCE005R5V224FS	0.92	0.62	0.71	0.08	0.10	0.015	0.042	<1
BCE005R5C334FAS	1.39	0.45	1.47	0.03	0.11	0.016	0.044	<1
BCE005R5H334FAS	1.39	0.92	2.24	0.07	0.16	0.016	0.044	<1
BCE005R5V334FAS	1.39	0.92	1.07	0.07	0.08	0.016	0.044	<1
BCE005R5C334FBS	1.39	0.45	1.33	0.03	0.10	0.016	0.044	<1
BCE005R5H334FBS	1.39	0.92	2.24	0.07	0.16	0.016	0.044	<1
BCE005R5V334FBS	1.39	0.92	1.07	0.07	0.08	0.016	0.044	<1
BCE005R5C474FS	1.97	0.62	1.90	0.04	0.12	0.031	0.085	<2
BCE005R5H474FS	1.97	1.23	3.18	0.08	0.20	0.031	0.085	<2
BCE005R5V474FS	1.97	1.23	1.52	0.08	0.10	0.031	0.085	<2

◎ BIGCAP 标准产品外形尺寸图 / Shape of standard product



◎ BIGCAP标准产品规格 / Standard product specification

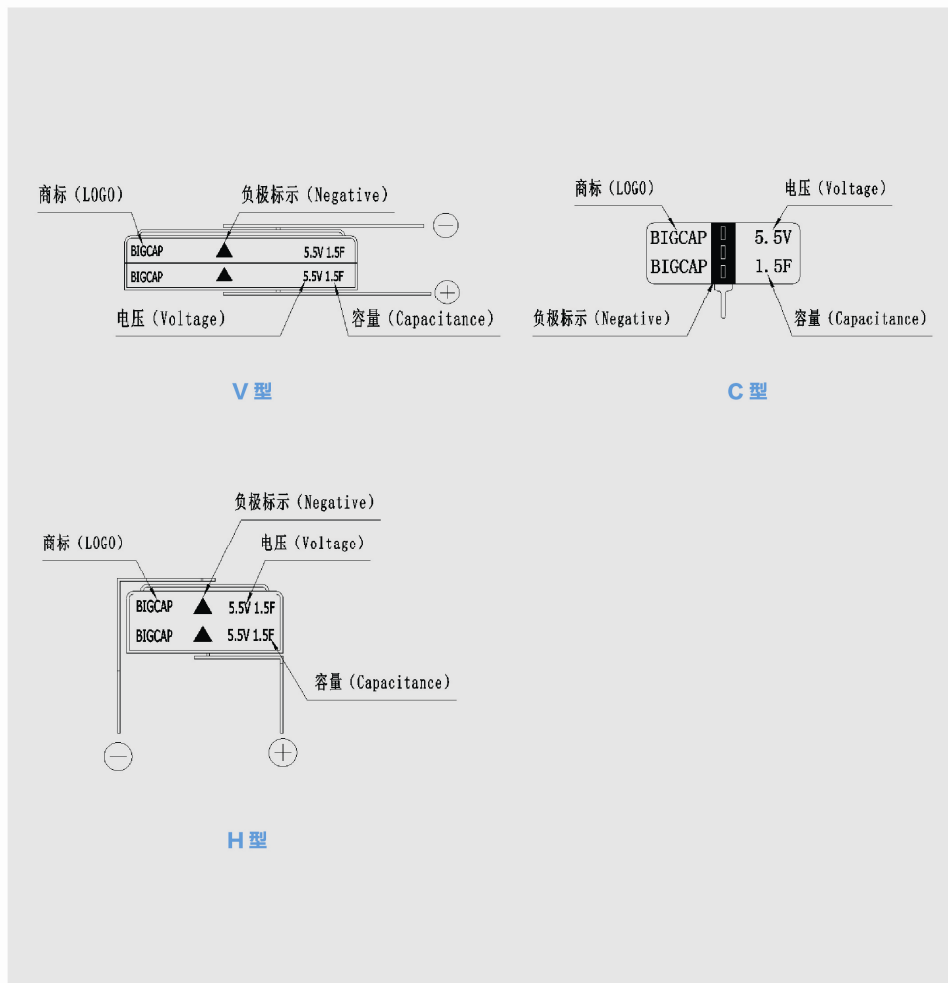
型号 Part Number	额定电压 Nominal Voltage ,V dc	容量 Capacitance F	容量 允许偏差 Cap.olerance	内阻 ESR, mΩ		尺寸 Size, mm ΦD×L	质量 Weight g	体积 Volume ml
				AC@1kHz	DC			
BCE005R5C105FS	5.5	1.0	±20%	15	22.5	20.5×7.6	9.0	2.51
BCE005R5H105FS	5.5	1.0	±20%	15	22.5	19×6.5	4.3	1.84
BCE005R5V105FS	5.5	1.0	±20%	15	22.5	19×20.5	4.3	5.80
BCE005R5C155FS	5.5	1.5	±20%	10	15	20.5×7.6	9.3	2.51
BCE005R5H155FS	5.5	1.5	±20%	10	15	19×6.5	4.5	1.84
BCE005R5V155FS	5.5	1.5	±20%	10	15	19×20.5	4.5	5.80
BCE005R5C205FS	5.5	2.0	±20%	10	15	20.5×7.7	10.0	2.54
BCE005R5H205FS	5.5	2.0	±20%	10	15	19×6.5	4.9	1.84
BCE005R5V205FS	5.5	2.0	±20%	10	15	19×20.5	4.9	5.80

型号 Part Number	存储能量 Max. Stored Energy, mWh	能量密度 Energy Density		功率密度 Power Density		额定电流 Nominal Current,A	最大电流 Max Current,A	72hLC Leakage Current at 72h (25℃) ,uA
		质量比 Wh/kg Gravimetric	体积比 Wh/L Volumetric	质量比 Wh/kg Gravimetric	体积比 Wh/L Volumetric			
BCE005R5C105FS	4.20	0.47	1.67	0.04	0.13	0.053	0.13	<2
BCE005R5H105FS	4.20	0.98	2.28	0.08	0.18	0.053	0.13	<2
BCE005R5V105FS	4.20	0.98	0.72	0.08	0.06	0.053	0.13	<2
BCE005R5C155FS	6.30	0.68	2.51	0.05	0.20	0.071	0.175	<3
BCE005R5H155FS	6.30	1.40	3.43	0.11	0.27	0.071	0.175	<3
BCE005R5V155FS	6.30	1.40	1.09	0.11	0.09	0.071	0.175	<3
BCE005R5C205FS	8.40	0.84	3.31	0.05	0.20	0.082	0.186	<4
BCE005R5H205FS	8.40	1.71	4.57	0.10	0.27	0.082	0.186	<4
BCE005R5V205FS	8.40	1.71	1.45	0.10	0.09	0.082	0.186	<4

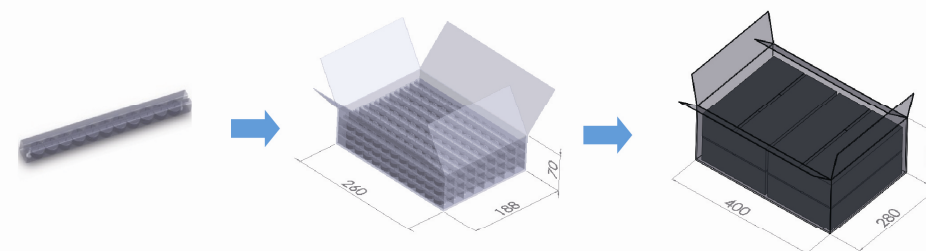
◎ 典型特性 / Typical characteristics

产品依据标准 Product Standard	依据IEC 62391-1, GB/T2693-2001, Q/BIG001-2013测试标准 According to IEC 62391-1, GB/T2693-2001, Q/BIG001-2013 test standard	
温度特性 Characteristics in Different Temperature	-25℃~+70℃	与初始值比较, ΔC/C ≤50%, ESR≤4倍初始规定值 Compared with the initial value, ΔC/C ≤50%, ESR≤4 Initial specified value
存储温度范围 (at 0V) Storage Temperature Range (at, 0V)	-25℃~+70℃	
湿热特性 (at 25℃, 90~95%RH) Humidity Characteristics (at 25℃, 90~95%RH)	240h	与初始值比较, ΔC/C ≤30%, ESR≤2倍初始规定值, 无漏液机械损伤 Compared with the initial value, ΔC/C ≤30%, ESR≤2 Initial specified value, no leaked electrolyte or other mechanical damage
常温寿命 (at U0,25℃) Predicted Life at Normal Temperature (at U0,25℃)	10年	与初始值比较, ΔC/C ≤30%, ESR≤4倍初始规定值, 无漏液机械损伤 Compared with the initial value, ΔC/C ≤30%, ESR≤4 Initial specified value, no leaked electrolyte or other mechanical damage
高温寿命 (at U0,70℃) High Temperature Life (at U0,70℃)	1000h	
循环寿命 (at U0,25℃) Cycle Life (at U0,25℃)	500000次	
存放寿命 (at 0V,70℃) Shelf Life (at 0V,70℃)	1000h	与初始值比较, ΔC/C ≤20%, ESR≤3倍初始规定值, 无漏液机械损伤 Compared with the initial value, ΔC/C ≤20%, ESR≤3 Initial specified value, no leaked electrolyte or other mechanical damage
自放电特性 (电压保持特性) (at 25℃) Self discharge characteristics (voltage holding characteristics) (at 25℃)	正负极间电压大于等于4.2V The voltage between the positive and negative electrode ≥4.2V	充电过程: 无负载, 额定电压充电24h 放置过程: 相对湿度小于60%RH, 开路放置24h Charging process: normal temperature, non-loaded, charge at rated voltage for 24h Lay aside process: temperature less than 25℃, relative humidity less than 60%RH, lay aside 24h at open circuit

◎ 标识 / Markings



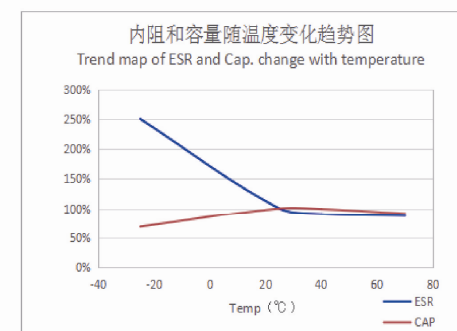
◎ 包装方式 / Packaging method



◎ 特性曲线 / characteristic curve

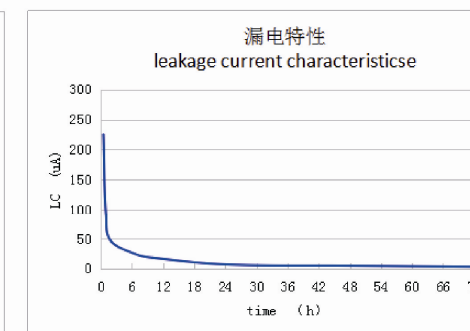
(1) 温度特性

Characteristics in different temperature



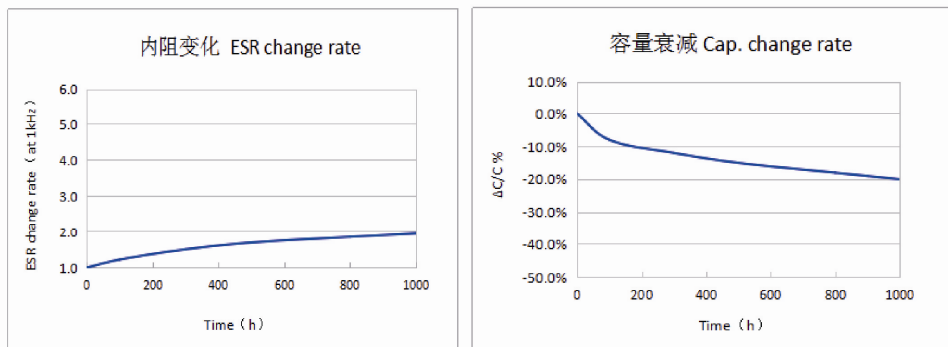
(2) 漏电流特性

LC characteristics

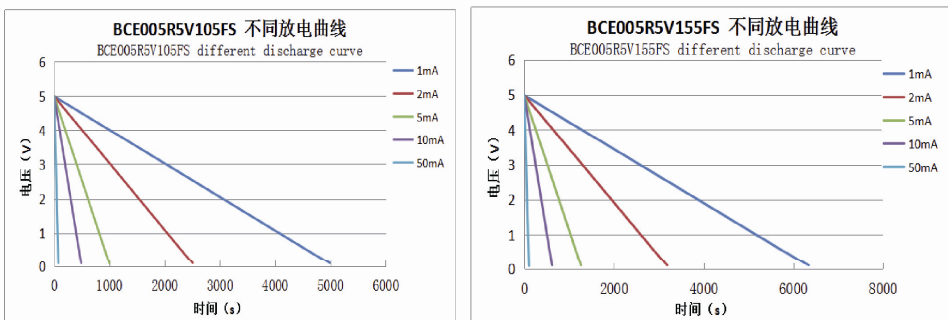


◎ 特性曲线 / characteristic curve

(3) 高温特性 High Temperature Life (at 5.5V, 70°C)



(4) 放电特性特性 LC characteristics



*以上特性曲线图均是趋势图，每一个型号的具体数据请与厂家技术支持联系

*The above characteristic curves are trend charts. Please contact the manufacturer's technical support for the specific data of each model

BCT 系列 BCT series

◎ 产品特点 / Features

- V、H、C 多种结构，安装时可选择；
V, H, C a variety of structure, can choose when to install;
- 符合ROHS标准，无Cd、Pb等污染物质；
Comply with ROHS standards no Cd Pb and other pollutants;
- 充放电循环寿命长；
Long charge-discharge cycle life;
- 漏电流低，适合时钟芯片数据保持。
Ultra-low leakage current, suitable for keeping the clock chip data.



◎ 应用 / Applications

- 工作电流 $\mu A \sim 10mA$ ，工作时间秒级至几个月；
Working current from $\mu A \sim 10mA$, working hours microseconds to a few months;
- 可用于手摇手电筒、电表、时钟保持、家电控制器、玩具等。
Can be used for Hand-cranked flashlight, Electric meter, Water meter, Gas meter, The clock to keep, Electrical home appliances control, toys, etc.

◎ 标准测试条件 / standard test conditions

- 在标准大气压，温度 $5 \sim 35^\circ C$ ，相对湿度小于85 %条件下进行测试；本规格书标准测试条件为标准大气压，温度 $25^\circ C$ ，相对湿度小于60%。
Products are tested under normal pressure, the temperature range is from $5 \sim 35^\circ C$ and relative humidity is less than RH85%. The standard test conditions in this product specification are as follows: under normal pressure; the temperature at $25^\circ C$ and the relative humidity less than 60%