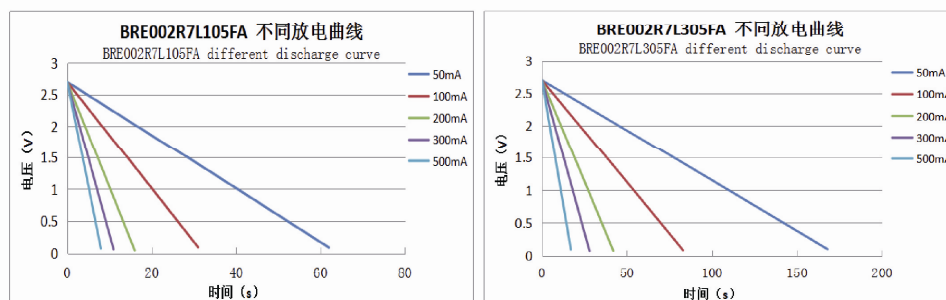


(4) 放电特性特性 LC characteristics



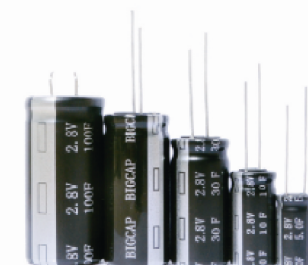
*以上特性曲线图均是趋势图，每一个型号的具体数据请与厂家技术支持联系

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

BRP 系列 BRP series

◎ 产品特点 / Features

- 圆柱外形结构，超低内阻；
Cylindrical shape structure, ultra-low internal resistance;
- 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;
- 适合中大功率放电；
Suitable for high power discharge;
- 耐压高，达到2.8V，同等条件下使用高可靠性。
High voltage up to 2.8V, under the same conditions with high reliability.



◎ 应用 / Applications

- 工作电流100mA~几百A，工作时间微秒级至几分钟；
Working current greater than 100mA, working hours microseconds to a few minutes;
- 可用于启动装置、雷管、税控机，玩具，电力设备等。
Can be used for starting device, detonator, the tax control machine, toys, electrical power equipment, etc.

◎ 标准测试条件 / standard test conditions

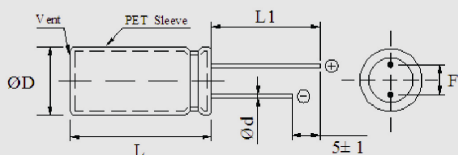
- 在标准大气压，温度5~35℃，相对湿度小于85%条件下进行测试；本规格书标准测试条件为标准大气压，温度25℃，相对湿度小于60%。
Products are tested under normal pressure, the temperature range is from 5~35℃ and relative humidity is less than RH85%. The standard test conditions in this product specification are as follows: under normal pressure; the temperature 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	2.7V-002R7	卷绕引线型-L	0.047-473	
卷绕AN系列-BRP	2.8V-002R8	卷绕盖板型-S/C	0.1F-104	
纽扣PC常规-BCE	5.4V-005R4	卷绕螺线型-W	0.47F-474	
纽扣4Φ小型-BCM	5.5V-005R5	卷绕螺柱型-B	1.0F-105	
纽扣高温系列 85℃-BCT	48-048R0	卷绕多引出型-M	8.0F-805	
组合高温系列85℃-BMT	100-100R0	纽扣立式-V	10F-106	
组合PC系列-BME	200-200R0	纽扣卧式-H	22F-226	
组合AN系列-RMP		纽扣C型-C	100F-107	
卷绕高比能量AN系列-BUP			360F-367	
卷绕高温系列85℃-BRT			400F-407	
			3000F-308	

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

导线型超级电容器示意图;
Shape of wire lead supercapacitor;



ΦD	5	6.3	8	10	12.5	16	18
Φd	0.5			0.6			0.8
F	2	2.5	3.5	5		7.5	8
L1	28		30		28		30

注:单位mm 说明: ΦD×L=12.5×21,L1=28mm

Note: unit mm Shows: ΦD×L=12.5×21,L1=28mm

◎ 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			
BRP002R8L104FA	2.8	0.1	0~+40%	450	675	5×12	0.40	0.24
BRP002R8L104FB	2.8	0.1	0~+40%	450	675	5×9.8	0.40	0.19
BRP002R8L154FA	2.8	0.15	±20%	400	600	5×12	0.40	0.24
BRP002R8L154FB	2.8	0.15	±20%	450	675	5×9.8	0.40	0.19
BRP002R8L224FA	2.8	0.22	±20%	500	750	5×12	0.40	0.24
BRP002R8L224FB	2.8	0.22	±20%	500	750	5×9.8	0.50	0.19
BRP002R8L254FA	2.8	0.25	±20%	500	750	5×12	0.50	0.24
BRP002R8L254FB	2.8	0.25	±20%	500	750	6.3×12	0.50	0.37
BRP002R8L354FA	2.8	0.35	±20%	400	600	5×12	0.60	0.24
BRP002R8L504FA	2.8	0.5	0~+40%	500	750	6.3×12	0.65	0.37
BRP002R8L504FB	2.8	0.5	±20%	500	750	5×12	0.65	0.24
BRP002R8L504FC	2.8	0.5	±20%	500	750	6.3×9.8	0.55	0.31
BRP002R8L704FA	2.8	0.7	0~+40%	400	600	8×13	0.85	0.65
BRP002R8L105FA	2.8	1.0	0~+40%	300	450	8×13	0.95	0.65
BRP002R8L105FB	2.8	1.0	0~+40%	200	300	8×19	1.25	0.95
BRP002R8L105FC	2.8	1.0	0~+80%	200	300	8×13	1.05	0.65
BRP002R8L105FD	2.8	1.0	±20%	300	450	6.3×12	0.70	0.37
BRP002R8L105FE	2.8	1.0	0~+40%	100	150	8×15	1.10	0.75
BRP002R8L105FG	2.8	1.0	0~+80%	80	120	10×20	1.50	1.57
BRP002R8L105FH	2.8	1.0	0~+40%	200	300	8×10	0.85	0.50
BRP002R8L205FA	2.8	2.0	±20%	140	210	8×19	1.45	0.95
BRP002R8L205FB	2.8	2.0	±20%	140	210	10×20	1.65	1.57
BRP002R8L305FA	2.8	3.0	0~+40%	100	150	8×19	1.40	0.95
BRP002R8L305FB	2.8	3.0	±20%	120	180	8×16	1.30	0.80
BRP002R8L335FA	2.8	3.3	±20%	80	120	10×20	1.90	1.57
BRP002R8L335FB	2.8	3.3	±20%	100	150	10×16	1.65	1.26
BRP002R8L405FA	2.8	4.0	±20%	80	120	10×20	2.10	1.57
BRP002R8L475FA	2.8	4.7	±20%	70	105	12.5×21	3.10	2.58
BRP002R8L475FB	2.8	4.7	+20%	70	105	10×20	3.10	1.57
BRP002R8L475FC	2.8	4.7	±20%	70	105	12.5×21	3.20	2.58
BRP002R8L505FA	2.8	5.0	0~+40%	70	105	10×20	2.20	1.57
BRP002R8L505FB	2.8	5.0	±20%	70	105	16×26	3.50	5.23
BRP002R8L605FA	2.8	6.0	±20%	70	105	10×20	2.40	1.57
BRP002R8L705FA	2.8	7.0	±20%	70	105	10×25	2.70	1.96
BRP002R8L805FA	2.8	8.0	±20%	50	75	12.5×21	3.50	2.58
BRP002R8L805FC	2.8	8.0	±20%	50	75	12.5×20	3.40	2.45
BRP002R8L106FA	2.8	10	±20%	50	75	12.5×26	3.90	3.19
BRP002R8L106FB	2.8	10	±20%	50	75	12.5×34	4.60	4.17
BRP002R8L106FC	2.8	10	±20%	60	90	12.5×21	3.30	2.58

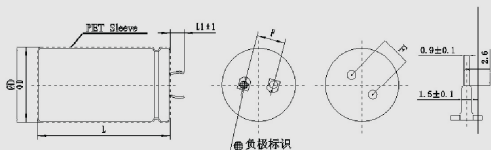
型号 Part Number	额定电压 Nominal Voltage, V dc	容量 Capacitance F	容量 允许偏差 Cap. tolerance	内阻 ESR, mΩ		尺寸 Size, mm ΦD × L	质量 Weight g	体积 Volume ml
				AC@1kHz	DC			
BRP002R8L106FD	2.8	10	±20%	50	75	10×30	3.20	2.36
BRP002R8L126FB	2.8	12	0~+40%	50	75	12.5×26	3.95	3.19
BRP002R8L156FA	2.8	15	±20%	30	45	16×26	6.00	5.23
BRP002R8L156FB	2.8	15	+20%	30	45	18×41	7.00	10.43
BRP002R8L166FA	2.8	16	±20%	30	45	16×21	5.70	4.22
BRP002R8L206FA	2.8	20	±20%	25	37.5	16×34	7.30	6.83
BRP002R8L226FA	2.8	22	±20%	25	37.5	16×26	7.00	5.23
BRP002R8L256FA	2.8	25	±20%	25	37.5	16×34	8.00	6.83
BRP002R8L306FA	2.8	30	±20%	25	37.5	16×34	8.70	6.83
BRP002R8L306FB	2.8	30	±20%	25	37.5	18×25	9.00	6.36
BRP002R8L406FA	2.8	40	±20%	20	30	18×41	13.50	10.43
BRP002R8L506FA	2.8	50	±20%	20	30	18×41	13.20	10.43
BRP002R8L606FA	2.8	60	±20%	15	22.5	18×41	14.10	10.43
BRP002R8L706FA	2.8	70	±20%	15	22.5	18×52	17.20	13.22

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°C) ,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			
BRP002R8L104FA	0.11	0.27	0.46	7.26	12.33	0.06	0.32	<1
BRP002R8L104FB	0.11	0.27	0.57	7.26	15.10	0.06	0.32	<1
BRP002R8L154FA	0.16	0.41	0.69	8.17	13.87	0.08	0.39	<1
BRP002R8L154FB	0.16	0.41	0.85	7.26	15.10	0.08	0.39	<1
BRP002R8L224FA	0.24	0.60	1.02	6.53	11.10	0.1	0.5	<1
BRP002R8L224FB	0.24	0.48	1.25	5.23	13.59	0.1	0.5	<1
BRP002R8L254FA	0.27	0.54	1.16	5.23	11.10	0.1	0.5	<1
BRP002R8L254FB	0.27	0.54	0.73	5.23	6.98	0.1	0.5	<1
BRP002R8L354FA	0.38	0.64	1.62	5.44	13.87	0.15	0.6	<1
BRP002R8L504FA	0.54	0.84	1.45	4.02	6.98	0.17	0.68	<2
BRP002R8L504FB	0.54	0.84	2.31	4.02	11.10	0.17	0.68	<2
BRP002R8L504FC	0.54	0.99	1.78	4.75	8.55	0.17	0.68	<2
BRP002R8L704FA	0.76	0.90	1.17	3.84	5.00	0.18	0.72	<2
BRP002R8L105FA	1.09	1.15	1.67	4.58	6.67	0.3	0.92	<2

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°C) ,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			
BRP002R8L105FB	1.09	0.87	1.14	5.23	6.84	0.3	0.92	<2
BRP002R8L105FC	1.09	1.04	1.67	6.22	10.00	0.45	1.41	<2
BRP002R8L105FD	1.09	1.56	2.91	6.22	11.63	0.26	0.81	<2
BRP002R8L105FE	1.09	0.99	1.44	11.88	17.34	0.3	0.92	<2
BRP002R8L105FG	1.09	0.73	0.69	10.89	10.40	0.45	1.41	<2
BRP002R8L105FH	1.09	1.28	2.17	7.69	13.00	0.3	0.92	<2
BRP002R8L205FA	2.18	1.50	2.28	6.44	9.78	0.58	2.0	<4
BRP002R8L205FB	2.18	1.32	1.39	5.66	5.94	0.58	2.0	<4
BRP002R8L305FA	3.27	2.33	3.42	9.33	13.69	0.77	3.19	<6
BRP002R8L305FB	3.27	2.51	4.06	8.38	13.55	0.77	3.19	<6
BRP002R8L335FA	3.59	1.89	2.29	8.60	10.40	0.77	3.19	<7
BRP002R8L335FB	3.59	2.18	2.86	7.92	10.40	0.77	3.19	<7
BRP002R8L405FA	4.36	2.07	2.77	7.78	10.40	0.87	4.19	<8
BRP002R8L475FA	5.12	1.65	1.99	6.02	7.25	1.26	5.0	<10
BRP002R8L475FB	5.12	1.65	3.26	6.02	11.89	1.26	5.0	<10
BRP002R8L475FC	5.12	1.60	1.99	5.83	7.25	1.26	5.0	<10
BRP002R8L505FA	5.44	2.47	3.47	8.48	11.89	1.26	5.0	<10
BRP002R8L505FB	5.44	1.56	1.04	5.33	3.57	1.26	5.0	<10
BRP002R8L605FA	6.53	2.72	4.16	7.78	11.89	1.52	5.5	<12
BRP002R8L705FA	7.62	2.82	3.88	6.91	9.51	2.06	6.0	<14
BRP002R8L805FA	8.71	2.49	3.38	7.47	10.15	2.26	7.0	<16
BRP002R8L805FC	8.71	2.56	3.55	7.69	10.65	2.26	7.0	<16
BRP002R8L106FA	10.89	2.79	3.41	6.70	8.19	2.45	9.0	<20
BRP002R8L106FB	10.89	2.37	2.61	5.68	6.27	2.45	9.0	<20
BRP002R8L106FC	10.89	3.30	4.23	6.60	8.45	2.45	9.0	<20
BRP002R8L106FD	10.89	3.40	4.62	8.17	11.10	2.45	9.0	<20
BRP002R8L126FB	13.07	3.31	4.10	6.62	8.19	2.45	9.0	<24
BRP002R8L156FA	16.33	2.72	3.13	7.26	8.33	3.16	9.3	<30
BRP002R8L156FB	16.33	2.33	1.57	6.22	4.18	3.16	9.3	<30
BRP002R8L166FA	17.42	3.06	4.13	7.64	10.32	3.45	10.2	<32
BRP002R8L206FA	21.78	2.98	3.19	7.16	7.65	5.63	16.9	<40
BRP002R8L226FA	23.96	3.42	4.58	7.47	10.00	5.63	16.9	<44
BRP002R8L256FA	27.22	3.40	3.98	6.53	7.65	5.8	17.6	<50
BRP002R8L306FA	32.67	3.75	4.78	6.01	7.65	6.5	18.8	<60
BRP002R8L306FB	32.67	3.63	5.14	5.81	8.22	6.5	18.8	<60
BRP002R8L406FA	43.56	3.23	4.18	4.84	6.27	10.4	27.0	<80
BRP002R8L506FA	54.44	4.12	5.22	4.95	6.27	10.4	27.0	<100
BRP002R8L606FA	65.33	4.63	6.27	6.18	8.35	11.6	30.2	<120
BRP002R8L706FA	76.22	4.43	5.76	5.06	6.59	13.8	34.5	<140

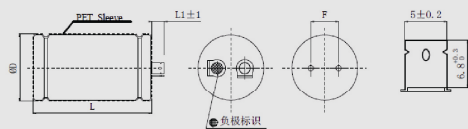
◎ BIGCAP 标准产品外形尺寸图 / Shape of standard product

盖板型超级电容器示意图:
Shape of snap-in and lead types supercapacitor:



ΦD	22.4	25.2	35.6
Φd	10		
F	5.5	6.5	
L1	45.5	52.5	61.5

注:单位mm Note: unit mm



ΦD	35.6		
Φd	14		
F	6.5		
L1	61.5	93	

注:单位mm Note: unit mm

◎ 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	容量 允许偏差	内阻 ESR, m Ω		尺寸 Size, mm $\Phi D \times L$	质量 Weight g	体积 Volume ml
				AC@1kHz	DC			
BRP002R8S606FA	2.8	60	$\pm 20\%$	14	16	22.4 $\times$ 45.5	18	22.68
BRP002R8S107FA	2.8	100	$\pm 20\%$	12	14	22.4 $\times$ 45.5	21	22.68
BRP002R8S157FA	2.8	150	$\pm 20\%$	12	14	25.2 $\times$ 52.5	31	38.59
BRP002R8S207FB	2.8	200	$\pm 20\%$	10	11	35.6 $\times$ 61.5	48.5	61.19
BRP002R8S307FA	2.8	300	$\pm 20\%$	8	9	35.6 $\times$ 61.5	60	61.19
BRP002R8S367FB	2.8	360	$\pm 20\%$	8	9	35.6 $\times$ 61.5	68	61.19
BRP002R8C207FB	2.8	200	$\pm 20\%$	10	11	35.6 $\times$ 61.5	48.5	61.19
BRP002R8C307FA	2.8	300	$\pm 20\%$	2.7	3	35.6 $\times$ 61.5	60	61.19
BRP002R8C307FB	2.8	300	$\pm 20\%$	8	9	35.6 $\times$ 61.5	60	61.19

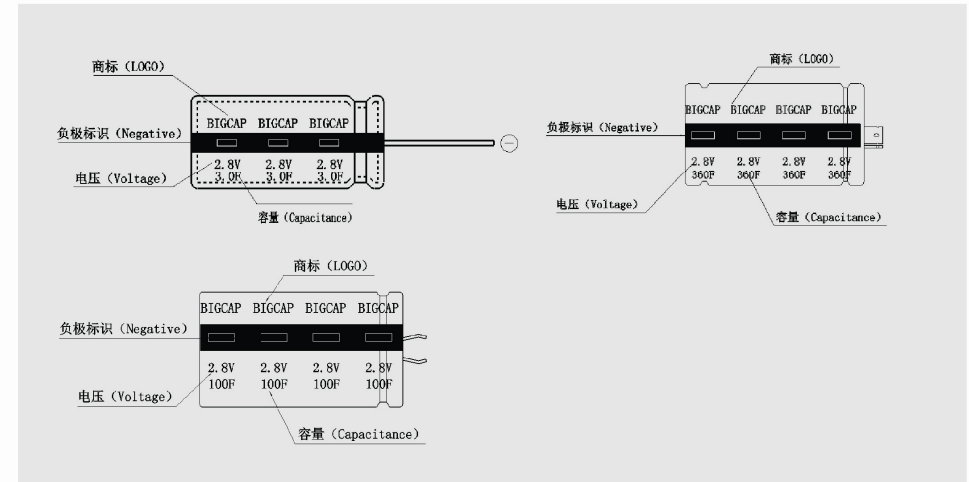
型号 Part Number	额定电压 Nominal Voltage ,V dc	容量 Capacitance	容量 允许偏差	内阻 ESR, m Ω		尺寸 Size, mm $\Phi D \times L$	质量 Weight g	体积 Volume ml
				AC@1kHz	DC			
BRP002R8C367FA	2.8	360	$\pm 20\%$	2.7	3	35.6 $\times$ 61.5	68	61.19
BRP002R8C367FB	2.8	360	$\pm 20\%$	8	9	35.6 $\times$ 61.5	68	61.19
BUP002R8C707FA	2.8	700	$\pm 20\%$	10	12	35.6 $\times$ 93	110	92.53

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 $^{\circ}$ C) , μ A
		质量比 Wh/kg Gravimetric	体积比 Wh/L Volumetric	质量比 Wh/kg Gravimetric	体积比 Wh/L Volumetric			
BRP002R8S606FA	65.33	3.63	2.88	10.89	8.64	6.0	50	<0.2
BRP002R8S107FA	108.89	5.19	4.80	11.67	10.80	6.5	65	<0.5
BRP002R8S157FA	163.33	5.27	4.23	7.90	6.35	7.7	70	<0.8
BRP002R8S207FB	217.78	4.49	3.56	5.77	4.50	8.0	80	<1.0
BRP002R8S307FA	326.67	5.44	5.34	6.53	6.41	9.0	85	<1.2
BRP002R8S367FB	392.00	5.76	6.41	5.76	6.41	9.4	90	<1.4
BRP002R8C207FB	217.78	4.49	3.56	5.77	4.58	8.0	80	<1.0
BRP002R8C307FA	326.67	5.44	5.34	10.89	10.68	20	160	<1.2
BRP002R8C307FB	326.67	5.44	5.34	6.53	6.41	9.0	85	<1.2
BRP002R8C367FA	392.00	5.76	6.41	9.61	10.68	25	180	<1.4
BRP002R8C367FB	392.00	5.76	6.41	5.76	6.41	9.4	90	<1.4
BUP002R8C707FA	762.22	6.93	8.24	2.55	3.03	11	100	<4.0

◎ 典型特性 / Typical characteristics

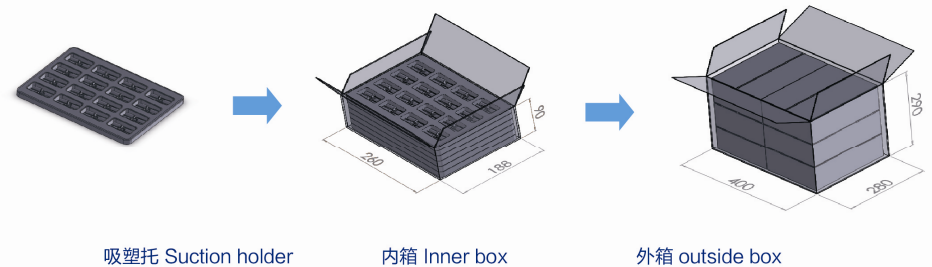
产品依据标准 Product Standard	依据 IEC 62391-1, GB/T2693-2001, Q/BIG001-2013 测试标准 According to IEC 62391-1, GB/T2693-2001, Q/BIG001-2013 test standard	
温度特性 Characteristics in Different Temperature	-40℃~+65℃ (-40℃~+70℃, at 2.7V)	与初始值比较, $ \Delta C/C \leq 30\%$, $ESR \leq 4$ 倍初始规定值 Compared with the initial value, $ \Delta C/C \leq 30\%$, $ESR \leq 4$ Initial specified value
存储温度范围 (at 0V) Storage Temperature Range (at, 0V)	-40℃~+70℃	
湿热特性 (at 25℃, 90~95%RH) Humidity Characteristics (at 25℃, 90~95%RH)	240h	与初始值比较, $ \Delta C/C \leq 30\%$, $ESR \leq 2$ 倍初始规定值, 无漏液机械损伤 Compared with the initial value, $ \Delta C/C \leq 20\%$, $ESR \leq 2$ Initial specified value, no leaked electrolyte or other mechanical damage
常温寿命 (at U ₀ , 25℃) Predicted Life at Normal Temperature (at U ₀ , 25℃)	10年	与初始值比较, $ \Delta C/C \leq 30\%$, $ESR \leq 4$ 倍初始规定值, 无漏液机械损伤 Compared with the initial value, $ \Delta C/C \leq 30\%$, $ESR \leq 4$ Initial specified value, no leaked electrolyte or other mechanical damage
高温寿命 (at U ₀ , 65℃) High Temperature Life (at U ₀ , 65℃)	1000h	
循环寿命 (at U ₀ , 25℃) Cycle Life (at U ₀ , 25℃)	500000次	
存放寿命 (at 0V, 65℃) Shelf Life (at 0V, 65℃)	1000h	与初始值比较, $ \Delta C/C \leq 20\%$, $ESR \leq 3$ 倍初始规定值, 无漏液机械损伤 Compared with the initial value, $ \Delta C/C \leq 20\%$, $ESR \leq 3$ 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 2.1V The voltage between the positive and negative electrode $\geq 2.1V$	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



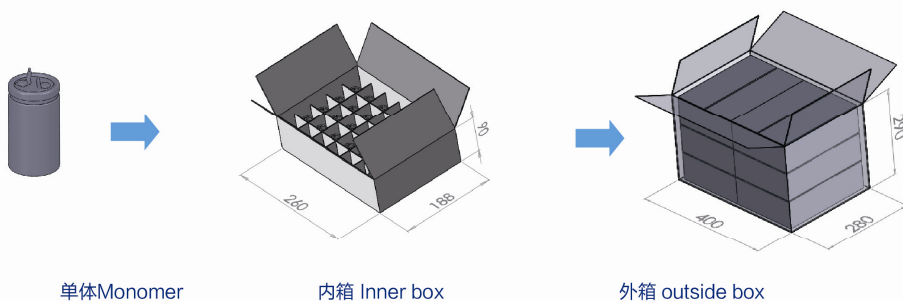
◎ 包装方式 / Packaging method

导线型电容器包装方式:
Packaging of Wire Lead Supercapacitor:



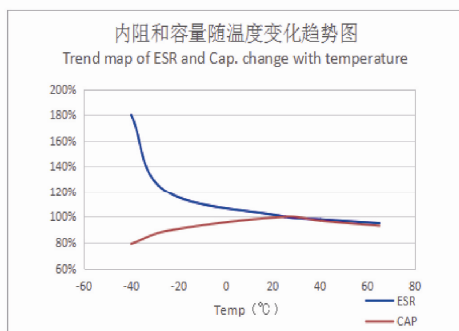
◎ 包装方式 / Packaging method

盖板型电容器包装方式:
Packaging of Snap-in and Lead Types Supercapacitor:

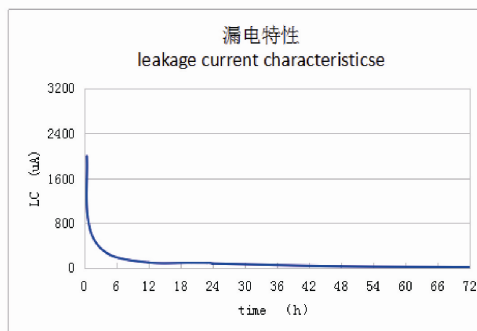


◎ 特性曲线 / characteristic curve

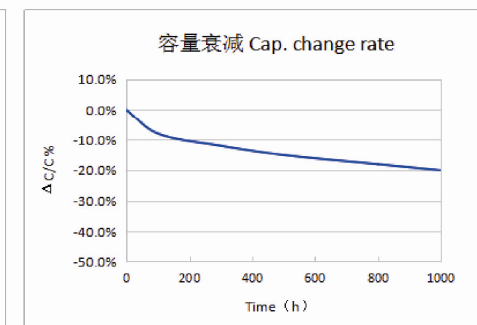
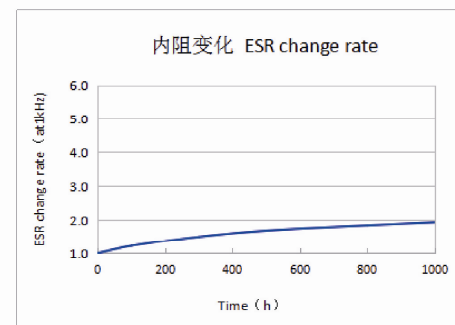
(1) 温度特性
Characteristics in different temperature



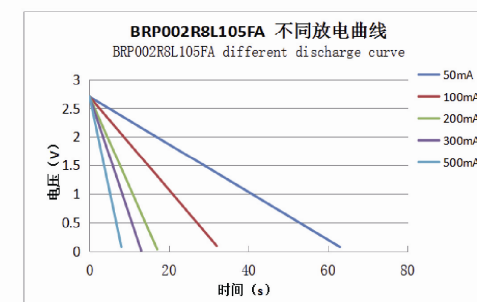
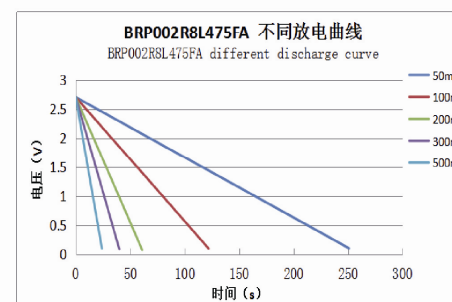
(2) 漏电流特性
LC characteristics



(3) 高温特性
High Temperature Life (at 2.8V, 65°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