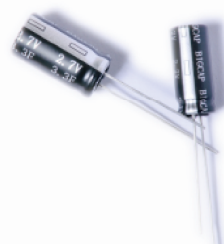


BRT 系列 BRT series

◎ 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;
- 耐温高, 可在+85℃的环境下使用。
High temperature resistant, can be used in + 85℃ environment.



◎ 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

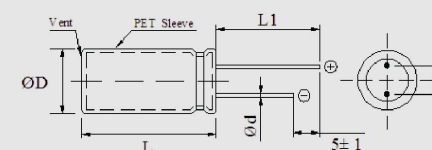
- 在标准大气压, 温度5~35℃, 相对湿度小于85%条件下进行测试; 本规格书标准测试条件为标准大气压, 温度25℃, 相对湿度小于60%。
Products are tested under normal pressure, the temperature range is from 5~35℃ and relative humidity is less than RH85%. The standard test conditions in this product specification are as follows: under normal pressure; the temperature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

导针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			
BRT002R7L104FA	2.7	0.1	0→+40%	450	675	5×12	0.4	0.24
BRT002R7L104FB	2.7	0.1	0→+40%	450	675	5×9.8	0.4	0.19
BRT002R7L154FA	2.7	0.15	±20%	400	600	5×12	0.4	0.24
BRT002R7L154FB	2.7	0.15	±20%	450	675	5×9.8	0.4	0.19
BRT002R7L224FA	2.7	0.22	±20%	500	750	5×12	0.4	0.24
BRT002R7L224FB	2.7	0.22	±20%	500	750	5×9.8	0.4	0.19
BRT002R7L254FA	2.7	0.25	±20%	500	750	5×12	0.5	0.24
BRT002R7L254FB	2.7	0.25	±20%	500	750	6.3×12	0.5	0.37
BRT002R7L354FA	2.7	0.35	±20%	400	600	5×12	0.6	0.24
BRT002R7L504FA	2.7	0.5	0→+40%	500	750	6.3×12	0.8	0.37
BRT002R7L504FB	2.7	0.5	±20%	500	750	5×12	0.8	0.24
BRT002R7L504FC	2.7	0.5	±20%	500	750	6.3×9.8	0.8	0.31
BRT002R7L704FA	2.7	0.7	0→+40%	400	600	8×13	1.0	0.65
BRT002R7L105FA	2.7	1.0	0→+40%	300	450	8×13	1.0	0.65
BRT002R7L105FB	2.7	1.0	0→+40%	200	300	8×19	1.4	0.95
BRT002R7L105FC	2.7	1.0	0→+80%	200	300	8×13	1.2	0.65
BRT002R7L105FD	2.7	1.0	±20%	300	450	6.3×12	1.3	0.37
BRT002R7L105FE	2.7	1.0	0→+40%	100	150	8×15	1.1	0.75
BRT002R7L105FG	2.7	1.0	0→+80%	80	120	10×20	1.5	1.57
BRT002R7L105FH	2.7	1.0	0→+40%	200	300	8×10	0.85	0.50
BRT002R7L205FA	2.7	2.0	±20%	140	210	8×19	1.6	0.95
BRT002R7L205FB	2.7	2.0	±20%	140	210	10×20	1.7	1.57
BRT002R7L305FA	2.7	3.0	0→+40%	100	150	8×19	1.6	0.95
BRT002R7L305FB	2.7	3.0	±20%	120	180	8×16	1.5	0.80
BRT002R7L335FA	2.7	3.3	0→+40%	80	120	10×20	2.1	1.57
BRT002R7L335FB	2.7	3.3	±20%	100	150	10×16	1.65	1.26
BRT002R7L475FA	2.7	4.7	±20%	70	105	12.5×21	3.2	2.58
BRT002R7L405FA	2.7	4	±20%	80	120	10×20	2.2	1.57
BRT002R7L475FB	2.7	4.7	±20%	70	105	10×20	3.1	1.57
BRT002R7L475FC	2.7	4.7	±20%	70	105	12.5×21	3.2	2.58
BRT002R7L505FA	2.7	5.0	0→+40%	70	105	10×20	2.4	1.57
BRT002R7L505FB	2.7	5.0	±20%	70	105	16×26	3.5	5.23
BRT002R7L605FA	2.7	6.0	±20%	70	105	10×20	2.5	1.57
BRT002R7L705FA	2.7	7.0	±20%	70	105	10×25	2.7	1.96
BRT002R7L805FA	2.7	8.0	±20%	50	75	12.5×21	3.6	2.58
BRT002R7L805FC	2.7	8.0	±20%	50	75	12.5×20	3.6	2.45
BRT002R7L106FA	2.7	10	±20%	50	75	12.5×26	4.2	3.19
BRT002R7L106FB	2.7	10	±20%	50	75	12.5×34	4.7	4.17
BRT002R7L106FC	2.7	10	±20%	60	90	12.5×21	3.7	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.olerance	内阻 ESR, mΩ		尺寸 Size, mm ΦD×L	质量 Weight g	体积 Volume ml
				AC@1kHz	DC			
BRT002R7L106FD	2.7	10	±20%	50	75	10×30	4.7	2.36
BRT002R7L106FG	2.7	10	±20%	50	75	16×17	5.3	3.42
BRT002R7L126FB	2.7	12	0→+40%	50	75	12.5×26	3.95	3.19
BRT002R7L156FA	2.7	15	±20%	30	45	16×26	6.2	5.23
BRT002R7L156FB	2.7	15	±20%	30	45	18×41	7	10.43
BRT002R7L156FD	2.7	15	±20%	30	45	16×17	5.5	3.42
BRT002R7L166FA	2.7	16	±20%	30	45	16×21	5.8	4.22
BRT002R7L206FA	2.7	20	±20%	25	37.5	16×34	7.3	6.83
BRT002R7L226FA	2.7	22	±20%	25	37.5	16×26	7.4	5.23
BRT002R7L256FA	2.7	25	±20%	25	37.5	16×34	8.4	6.83
BRT002R7L306FA	2.7	30	±20%	25	37.5	16×34	9	6.83
BRT002R7L306FB	2.7	30	±20%	25	37.5	18×25	9	6.36
BRT002R7L406FA	2.7	40	±20%	20	30	18×41	13.5	10.43
BRT002R7L506FA	2.7	50	±20%	20	30	18×41	13.2	10.43
BRT002R7L606FA	2.7	60	±20%	15	22.5	18×41	14.1	10.43
BRT002R7L706FA	2.7	70	±20%	15	22.5	18×52	19	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℃) ,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			
BRT002R7L104FA	0.10	0.25	0.43	6.75	11.46	0.06	0.32	<1
BRT002R7L104FB	0.10	0.25	0.53	6.75	14.04	0.06	0.32	<1
BRT002R7L154FA	0.15	0.38	0.64	7.59	12.90	0.08	0.39	<1
BRT002R7L154FB	0.15	0.38	0.79	6.75	14.04	0.08	0.39	<1
BRT002R7L224FA	0.22	0.56	0.95	6.08	10.32	0.10	0.50	<1
BRT002R7L224FB	0.22	0.56	1.16	6.08	12.64	0.10	0.50	<1
BRT002R7L254FA	0.25	0.51	1.07	4.86	10.32	0.10	0.50	<1
BRT002R7L254FB	0.25	0.51	0.68	4.86	6.49	0.10	0.50	<1
BRT002R7L354FA	0.35	0.59	1.50	5.06	12.90	0.15	0.60	<1
BRT002R7L504FA	0.51	0.63	1.35	3.04	6.49	0.17	0.68	<2
BRT002R7L504FB	0.51	0.63	2.15	3.04	10.32	0.17	0.68	<2
BRT002R7L504FC	0.51	0.63	1.66	3.04	7.95	0.17	0.68	<2
BRT002R7L704FA	0.71	0.71	1.09	3.04	4.65	0.18	0.72	<2
BRT002R7L105FA	1.01	1.01	1.55	4.05	6.20	0.30	0.92	<2
BRT002R7L105FB	1.01	0.72	1.06	4.34	6.36	0.30	0.92	<2
BRT002R7L105FC	1.01	0.84	1.55	5.06	9.30	0.45	1.41	<2
BRT002R7L105FD	1.01	0.78	2.70	3.12	10.82	0.26	0.81	<2

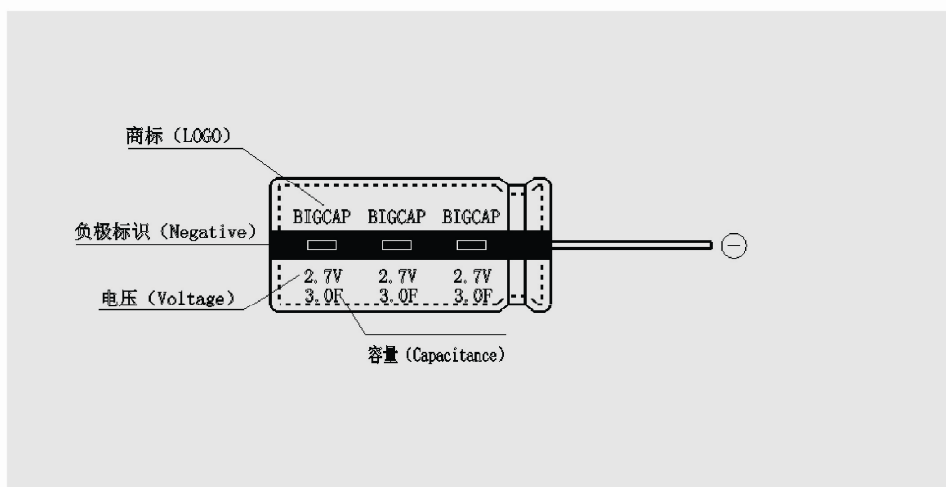
© BIGCAP标准产品规格 / Standard product specification

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			
BRT002R7L105FE	1.01	0.92	1.34	11.05	16.12	0.30	0.92	<2
BRT002R7L105FG	1.01	0.68	0.64	10.13	9.67	0.45	1.41	<2
BRT002R7L105FH	1.01	1.19	2.02	7.15	12.09	0.30	0.92	<2
BRT002R7L205FA	2.03	1.27	2.12	5.42	9.09	0.58	2.0	<4
BRT002R7L205FB	2.03	1.19	1.29	5.11	5.53	0.58	2.0	<4
BRT002R7L305FA	3.04	1.90	3.18	7.59	12.73	0.77	3.19	<6
BRT002R7L305FB	3.04	2.03	3.78	6.75	12.60	0.77	3.19	<6
BRT002R7L335FA	3.34	1.59	2.13	7.23	9.67	0.77	3.19	<7
BRT002R7L335FB	3.34	2.03	2.66	7.36	9.67	0.77	3.19	<7
BRT002R7L405FA	4.05	1.84	2.58	6.90	9.67	0.87	4.19	<8
BRT002R7L475FA	4.76	1.49	1.85	5.42	6.74	1.26	5.0	<10
BRT002R7L475FB	4.76	1.54	3.03	5.60	11.06	1.26	5.0	<10
BRT002R7L475FC	4.76	1.49	1.85	5.42	6.74	1.26	5.0	<10
BRT002R7L505FA	5.06	2.11	3.22	7.23	11.06	1.26	5.0	<10
BRT002R7L505FB	5.06	1.45	0.97	4.96	3.32	1.26	5.0	<10
BRT002R7L605FA	6.08	2.43	3.87	6.94	11.06	1.52	5.53	<12
BRT002R7L705FA	7.09	2.63	3.61	6.43	8.84	2.06	6.0	<14
BRT002R7L805FA	8.10	2.25	3.14	6.75	9.43	2.26	7.0	<16
BRT002R7L805FC	8.10	2.25	3.30	6.75	9.91	2.26	7.0	<16
BRT002R7L106FA	10.13	2.41	3.17	5.79	7.62	2.45	9.0	<20
BRT002R7L106FB	10.13	2.15	2.43	5.17	5.83	2.45	9.0	<20
BRT002R7L106FC	10.13	2.74	3.93	5.47	7.86	2.45	9.0	<20
BRT002R7L106FD	10.13	2.15	4.30	5.17	10.32	2.45	9.0	<20
BRT002R7L106FG	10.13	1.91	2.96	4.58	7.11	2.45	9.0	<20
BRT002R7L126FB	12.15	3.08	3.81	6.15	7.62	2.45	9.0	<24
BRT002R7L156FA	15.19	2.45	2.91	6.53	7.75	3.16	9.3	<30
BRT002R7L156FB	15.19	2.17	1.46	5.79	3.88	3.16	9.3	<30
BRT002R7L156FD	15.19	2.76	4.44	7.36	11.85	2.45	9.0	<30
BRT002R7L166FA	16.20	2.79	3.84	6.98	9.59	3.45	10.2	<32
BRT002R7L206FA	20.25	2.77	2.96	6.66	7.11	5.63	16.9	<40
BRT002R7L226FA	22.28	3.01	4.26	6.57	9.30	5.63	16.9	<44
BRT002R7L256FA	25.31	3.01	3.70	5.79	7.11	5.8	17.6	<50
BRT002R7L306FA	30.38	3.38	4.44	5.40	7.11	6.5	18.8	<60
BRT002R7L306FB	30.38	3.38	4.78	5.40	7.64	6.5	18.8	<60
BRT002R7L406FA	40.50	3.00	3.88	4.50	5.83	10.4	27.0	<60
BRT002R7L506FA	50.63	3.84	4.86	4.60	5.83	10.4	27.0	<100
BRT002R7L606FA	60.75	4.31	5.83	5.74	7.77	11.6	30.2	<120
BRT002R7L706FA	70.88	3.73	5.36	4.26	6.13	13.8	34.5	<140

© 典型特性 / Typical characteristics

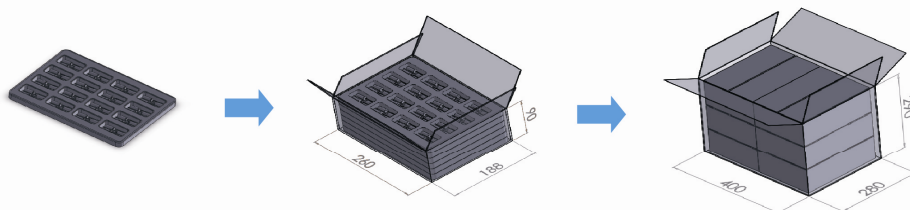
产品依据标准 Product Standard	依据IEC 62391-1, GB/T2693-2001, Q/BIG001-2013测试标准 According to IEC 62391-1, GB/T2693-2001, Q/BIG001-2013 test standard	
温度特性 Characteristics in Different Temperature	-40℃~+85℃	与初始值比较, ΔC/C ≤30%, ESR≤4倍初始规定值 Compared with the initial value, ΔC/C ≤30%, ESR≤4 Initial specified value
存储温度范围 (at 0V) Storage Temperature Range (at, 0V)	-40℃~+85℃	
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 ≤20%, 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
循环寿命 (at U0,25℃) Cycle Life (at U0,25℃)	500000次	
高温寿命 (at U0,85℃) High Temperature Life (at U0,85℃)	1000h	与初始值比较, ΔC/C ≤40%, ESR≤5倍初始规定值, 无漏液机械损伤 Compared with the initial value, ΔC/C ≤40%, ESR≤5 Initial specified value, no leaked electrolyte or other mechanical damage
存放寿命 (at 0V,85℃) Shelf Life (at 0V,85℃)	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2.1V The voltage between the positive and negative electrode ≥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

导针型电容器包装方式:
Packaging of Wire Lead Supercapacitor:



吸塑托 Suction holder

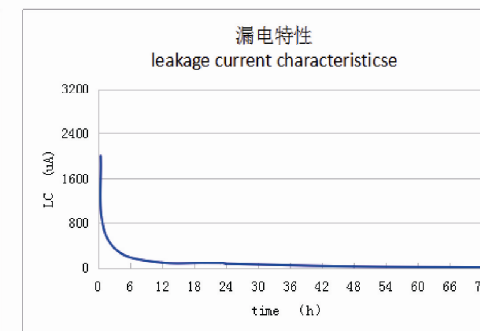
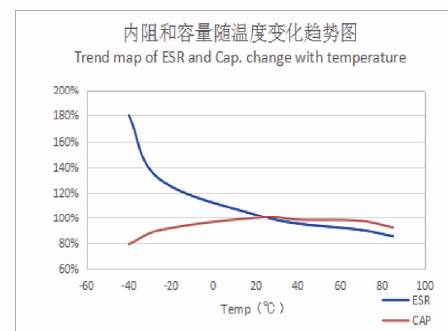
内箱 Inner box

外箱 outside box

◎ 特性曲线 / characteristic curve

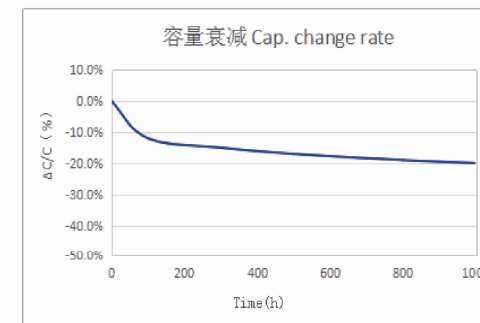
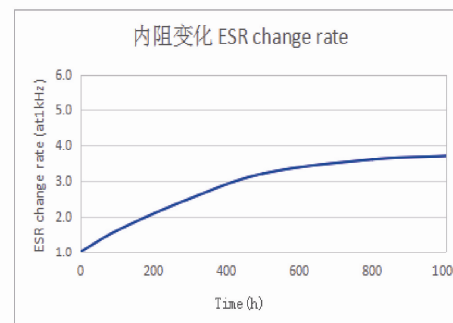
(1) 温度特性

Characteristics in different temperature

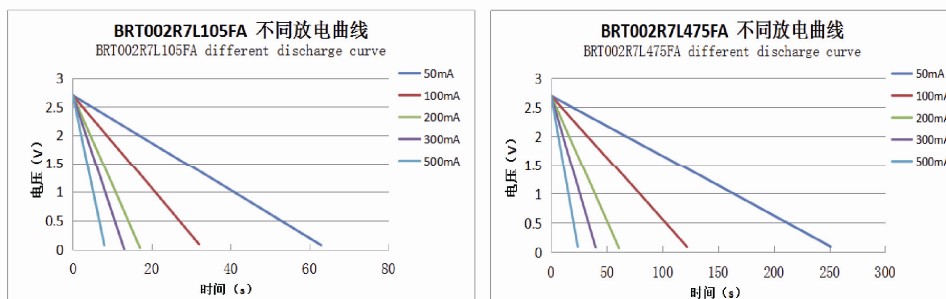


(3) 高温特性

High Temperature Life (at 2.7V, 85°C)



(4) 放电特性特性 LC characteristics



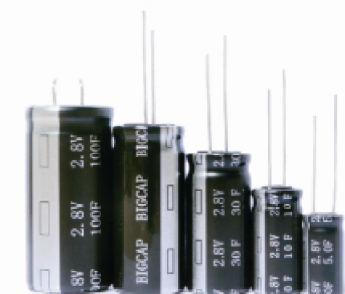
*以上特性曲线图均是趋势图，每一个型号的具体数据请与厂家技术支持联系

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

BUP 系列 BUP 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%