

2R1000HL-8×6

Features

- 快速响应 Fast Response
- 性能稳定，超过表面寿命 Stable Performance Over Surface Life
- 高额定电流 High Current Rating
- 低电容 Low Capacitance
- 绝缘电阻高 High Insulation Resistance
- 符合 RoHS 和 REACH RoHS & REACH Compliant

Specification Status:Draft (mm)

未注明公差按GB1804-C级(Not specified tolerances according to GB1804 - C level)

($0.5 \sim 3 \pm 0.2$; $> 3 \sim 6 \pm 0.3$; $> 6 \sim 30 \pm 0.5$; $> 30 \sim 120 \pm 0.8$; $> 120 \sim 400 \pm 1.2$; $> 400 \sim 1000 \pm 2$;)

Technical drawing of a mechanical part with three views: front, top, and side. The front view shows a long cylinder with a central rectangular feature of length L and diameter D . The top view shows a rectangle with width T . The side view shows a circle with diameter D . Dimension lines indicate L , T , and D .

Electrical Characteristics (TA = 25 °C unless otherwise noted)

规格 Model Name	直流击穿电压DC Breakdown Voltage	最大冲击击穿电压 Maximum Impulse Breakdown Voltage		最大冲击放电电流 Maximum Impulse Discharge Current 8/20 μs	
	(V)	(V)		(KA)	
	100~2000V/S	100V/us	1000V/us	1time	10times
2R-1000HL	1000 ± 20%	1700	2000	25	20

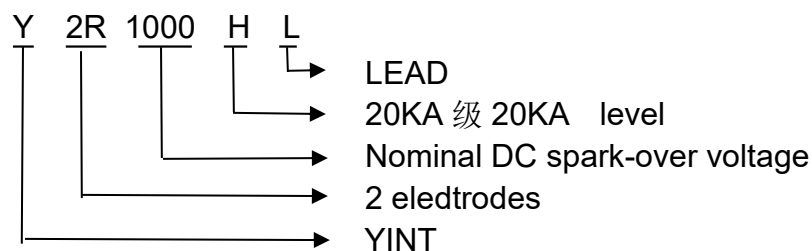
规格 Model Name	标称交流放电电流 Alternating Discharge Current		冲击寿命 Impulse Life	直流过保持电压 DC Holdover Voltage	最小绝缘电阻 Minimum Insulation Resistance	最大电容值 Maximum Capacitance
	(A)		(times)	(V)	(G Ω)	(pf)
	50Hz, 1Sec	Single 9cycles	10/1000us, 100A	< 150ms	Note 1	1MHz
2R-1000HL	20	65	500	135	1	1.5

Note 1: 绝缘电阻测试条件 Insulation resistance test condition:

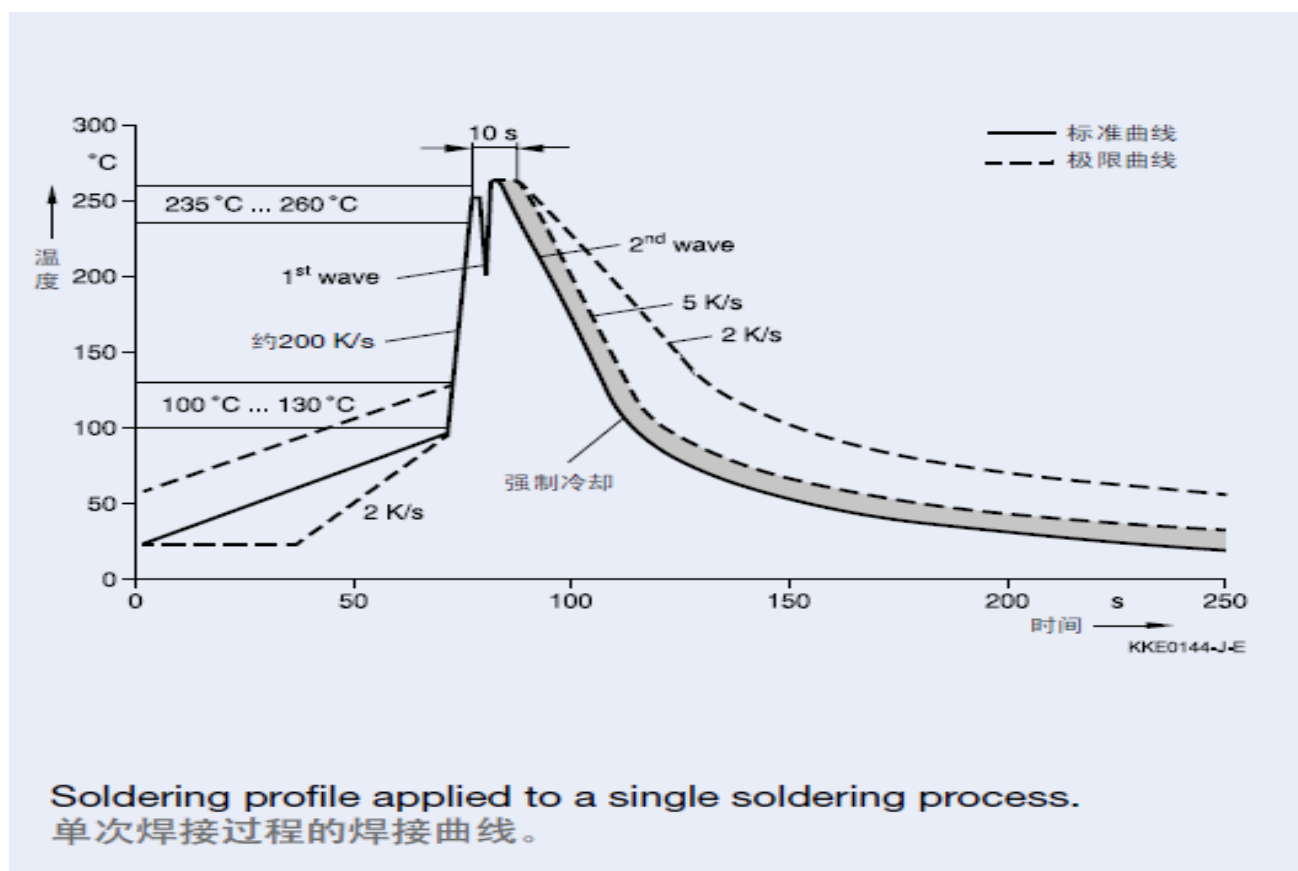
直流击穿电压 DC Breakdown Voltage	≤150V	151~400V	401~1000V	1001~2000V	≥2001V
直流测量电压 DC Measuring Voltage	50V	100V	250V	500V	1000V

Note 2: 交货抽样标准 At delivery AQL 0.65 Level II, IN ISO 2859.

Marking



wave soldering curve



Package

	PVC 盒 Tray	内盒 Inner Box	外箱 Carton
尺寸 Dimensions	264×145×10	270×145×50	310×280×275
数量Quantity	1PVC盒=100pcs 1 tray =100pcs	1内盒=5PVC盒=500pcs 1 Inner Box=5 tray =500pcs	1外箱=10内盒=5000pcs 1Carton=10 Inner Box =5000pcs

术语 Glossary (IEC 61643-311;GB/T18802.311)

1. 气体放电管 Gas Discharge Tube

由密封在不同大气压下空气的放电介质中单间隙或多间隙组成的器件，用于保护电器和人身免受 瞬态过电压的危

害。

A gap, or several gaps, in an enclosed discharge medium, other than air at atmospheric pressure, designed to protect apparatus or personnel, or both, from high transient voltages.

2. 直流击穿电压 DC Breakdown (Spark-over) Voltage(Vs)

在没有施加电压时, GDT 至少放置 15min, 并在这种情况下, 以电压上升速率为 100V/S~2000V/S 进行测试。The GDT shall be placed for at least 15min when no voltage is applied, the test shall be conducted at a voltage rise rate of 100v/s~2000v/s under this circumstances.

3. 最大冲击击穿电压 Maximum Impulse Breakdown Voltage (Vsi)

通过 GDT 测量的被测端子的最大电压标称上升速率为 100V/ μ s 或 1000V/ μ s 或 5000V/ μ s。

The maximum voltage rise rate of the measured terminal measured by GDT is 100V/ μ s, 1000V/ μ s, or 5000V/ μ s.

4. 最大冲击放电电流 Maximum Impulse Discharge Current

GDT 可承受的 1 次,多次或正负各 N 次的最大冲击电流值(电流波形 8/20 μ s 或 10/350 μ s), 多次或 N 次冲击每次间隔 3 分钟。

GDT can withstand 1 time, More than once or positive and negative each N times of the maximum impact current value (current waveform 8/20 μ s or 10/350 μ s), More than once or N times of impact each interval of 3 minutes.

5. 冲击耐受电压能力 Impulse Withstanding Voltage Capacity

以额定最大放电电流 (开路电压波形 10x700 μ s), GDT 应可承受正负各 5 次,每次间隔 3 分钟。

At the rated maximum discharge current (open circuit voltage waveform 10x700 μ s), the GDT shall be able to withstand plus or minus 5 times each at an interval of 3 minutes

6. 标称交流放电电流 Nominal Discharge Current

对产品施加频率 50Hz*1 秒*10 次 (每次间隔时间 3 分钟) 或 Single 9cycles 交流电流的额定有效值。

Apply rated RMS of ac current of 50Hz*1 second multiply 10 times (each interval is 3 minutes) or Single 9cycles to the product.

7. 续流 Follow On Current

在标准的试验回路施加交流电 (工频电流应用电阻限制), 对 GDT 产品施加一个冲击电流使其处于导通状态, 同时连接之交流电源提供的流过 GDT 产品的电流。

An alternating current is applied to the standard test circuit (power frequency current is limited by resistance), and a shock current is applied to the GDT product so that it is on, while the current flowing through the GDT product is provided by the connected AC power supply.

8. 响应时间 Breakdown time

用固定电压上升陡度之电压源 (1000V/ μ s 或 5000V/ μ s) 加到 GDT 两端测量响应时间 (从暂态过电压开始作用于放电管两端的时刻到产品实际放电时刻之间有一个延迟时间)。

A voltage source with a fixed voltage gradient (1000V/ μ s or 5000V/ μ s) is applied to both ends of the GDT to measure the response time (there is a delay time between the moment when the transient overvoltage starts acting on both ends of the discharge tube and the actual discharge time of the product)

9. 最大持续工作电压 Maximum continuous operating voltage

产品正常工作时可施加的最大连续交流/直流电压。

Maximum continuous AC/DC voltage that can be applied when the product is in normal operation.

10. 冲击寿命 Impulse Life

GDT 可以承受额定次数的电流冲击 (电流波形: 8/20 μ s、10/1000 μ s 或 5/320 μ s), 各次冲击的间隔时间 3 分钟。

The GDT can withstand rated times of current shock (current waveform: 8/20 μ s, 10/1000 μ s or 5/320 μ s), The interval of each shock is 3 minutes.

11. 直流过保持电压 DC Holdover Voltage

在规定的电路条件下, GDT 经一次冲击放电后, 它从导通并恢复到高阻抗状态时施加的直流电压 (直流试验电压分

为 52V/80V 和 135V 三档)。

Under the specified circuit conditions, GDT after a shock discharge, it from the conduction and restore to the high impedance state of the applied DC voltage (DC test voltage is divided into 52V/80V and 135V three grades).

12. 最小绝缘电阻 Minimum Insulation Resistance

在 GDT 的两端点间施加额定电压, 测量电阻值。

A rated voltage is applied between the two endpoints of the GDT to measure the resistance.

13. 最大电容值 Maximum Capacitance

使用测试频率 1MHz 与测试电压 0.5V 在 GDT 两端间测量电容值。

Measure the capacitance between the two ends of the GDT using a test frequency of 1MHz and a test voltage of 0.5V.

14. 弧光电压 Arc Voltage

在低阻抗或正常动作状态下, 弧光电流流过气体放电管时的电压降。

The voltage measured across the tube while in lowest impedance state or arc mode.

15. 辉光电压 Glow Voltage

流过辉光电流时跨越放电管电压降的峰值。

The peak value of the voltage drop across the GDT when a glow-current is flowing.

16. AC/DC 耐压 AC/DC withstand Voltage

通过高压设备对产品施加一定(AC/DC)电压的测试, 确保产品不被击穿。

By applying a certain voltage (AC/DC) to the product through high voltage equipment test, to ensure that the product is not broken down.

技术条件及测试方法 Technical Term or Test methods

1. 储存条件 Storage Conditions (-40℃~105℃)

储存条件无施加电压

Storage conditions without voltage applied

包装好的放电管应置于干燥、通风和无腐蚀的环境中。

Please store products in the environments of dry, ventilation and no-corrosion,

期限一年

period One year.

2. 工作温度范围 Operational temperature (-40℃~105℃)

GDT 应能够在工作条件下耐受而不会损坏

Gas discharge tubes shall be capable of withstanding during operational conditions without damage

3. 测试方法 Test methods:

除非另有说明,所有的测试时在下述的环境条件下进行。

Unless otherwise specified, all tests are made under environmental conditions as given below,

温度 Temperature:15~35℃,

相对湿度 Relative humidity:25~80%RH.

注意事项 Warning

1. 在电源线路中最大运行电压超过气体放电管的最小开启电压, 不能使用气体放电管。

Do not operate gas discharge tube in power supply networks, whose maximum operation voltage exceeds the minimum spark-overvoltage of the gas discharge tube.

2. 气体放电管在电流长时间压力下会变热(起火).这种过载将使连接器失效或器件损坏。

Gas discharge tube may become hot in the event of longer periods of current stress (burn risk).In the event of overload the connectors may fail or the component may be destroyed.

3. 如果气体放电管的接触有缺陷，超载的电流能引产生火花和大的噪音。
If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
4. 气体放电管必须小心轻放，不得跌落。
Gas discharge tube must be handled with care and must not be dropped.
5. 损坏的放电管不能继续使用。
6. Do not continue to use damaged gas discharge tube.

规格书之有效性 Validity

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