

## 1. 适用范围 Scope of application

本产品适用于通信设备及其它各种电子设备的电路中起瞬时过电压保护作用，以免这些设备遭高电压及雷击破坏。

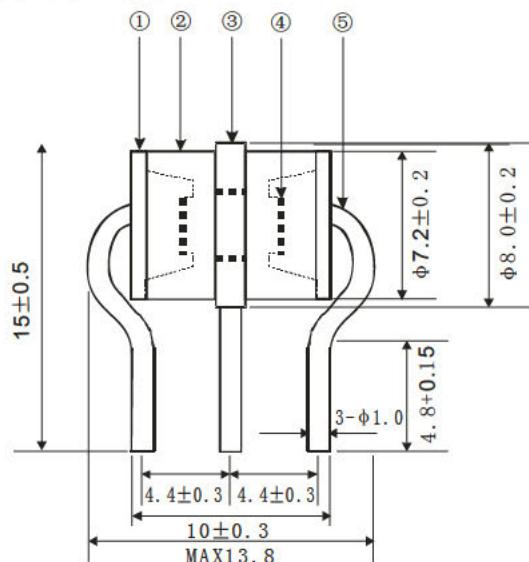
This product is suitable for communication equipments and other electronic equipments for transient over-voltage protection against high voltage and lightning damage.

## 2. 相关标准 Relevant standards

1) 执行标准：GB/T9043-2008 《通信设备过电压保护用气体放电管通用技术条件》。

Standard: GB/T9043-2008 《General technical requirements of gas discharge tubes for the over-voltage protection of telecommunications installations》 .

## 3. 结构及尺寸 (单位: mm) Structure and size (Unit: mm)



## 4. 原材料明细 Material Details

编号 No.	零件名称 Part name	材质 Material
①	电极 Electrode	铁镍合金 Iron-nickel alloy
②	瓷管 Ceramic tube	三氧化二铝 $\text{Al}_2\text{O}_3$
③	中间电极 Intermediate electrode	铁镍合金 Iron-nickel alloy
④	电子粉 Electronic powder	硅酸钠等 $\text{Na}_2\text{SiO}_3$ etc
⑤	引线 Lead wire	镀锡铜线 Tinned copper wire

## 5. 编号说明 Number Description

BL-3R    090

(1)                (2)

- (1) 产品型号 Product Model
- (2) 直流击穿电压标称值(V) DC spark-over voltage nominal value(V)
- (3) 耐 8/20μs 短波冲击电流 10KA, 体积 8X10MM Resistance to 8/20μs Impulse Discharge Current 10KA, Volume 8X10MM.

## 6. 电气性能 Electrical characteristics

目录编号 Catalog NO.	直流击穿电压 DC Spark Over Voltage (100vs)V	冲击击穿电压 Impulse Spark Over Voltage (1kv/ μ s) V	绝缘电阻 Insulation Resistance	极间电容 Electrode Capacitance	耐短波电流 Impulse Discharge Current (8/20 μ s 1MHz 0.5V PF	耐交流电流 AC Discharge Current (50Hz 1s 10 times)	过保持电压 Holdover Voltage
BL-3R 075	075±20%	≤600	≥1	≤1.5	10KV	10A	52
BL-3R 090	090±20%	≤600	≥1	≤1.5	10KV	10A	52
BL-3R 150	150±20%	≤600	≥1	≤1.5	10KV	10A	52
BL-3R 230	230±20%	≤700	≥1	≤1.5	10KV	10A	80
BL-3R 350	350±20%	≤1000	≥1	≤1.5	10KV	10A	135
BL-3R 420	420±20%	≤1000	≥1	≤1.5	10KV	10A	135
BL-3R 470	470±20%	≤1200	≥1	≤1.5	10KV	10A	135
BL-3R 600	600±20%	≤1400	≥1	≤1.5	10KV	10A	135
BL-3R 800	800±20%	≤1600	≥1	≤1.5	10KV	10A	135

## 7. 测试方法 Test methods

### 7.1 直流击穿电压 DC Spark-over Voltage

测试电路如图 1 所示。测试电源的直流电压上升速率为 100V/s, 其放电电流限制在 5~15mA。产品的放电电极间都应测试正、反极性击穿电压。与测试无关的电极应悬空。

The test circuit is shown in Figure 1. The DC voltage rise speed of test power supply is 100V/s, Discharging current is limited to 5~15mA. The positive and reverse polarity spark-over voltage of product should be tested in discharge inter-electrode. Has nothing to do with the test electrode should be left open.

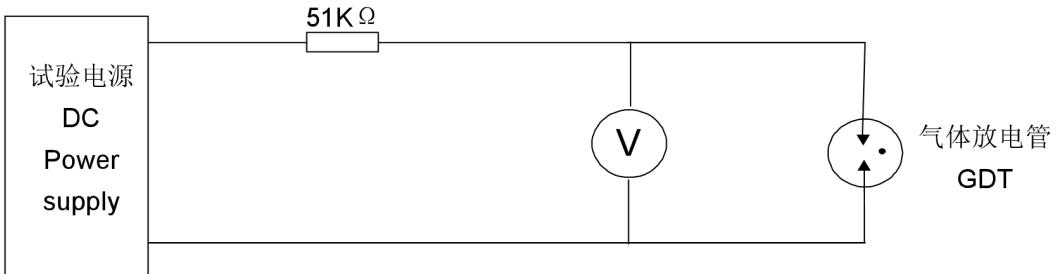


图 1 直流击穿电压测试电路 DC Spark-over Voltage Test Circuit

## 7.2 冲击击穿电压 Impulse Spark-over Voltage

测试电路如图 2 所示。测试电压的上升速率为  $1\text{KV}/\mu\text{s}$ ，产品的放电电极间都应测试正、反极性击穿电压。与测试无关的电极应悬空。

The test circuit is shown in Figure 2. The test voltage rise speed of is  $1\text{KV}/\mu\text{s}$ , The positive and reverse polarity spark-over voltage of product should be tested in discharge inter-electrode. Has nothing to do with the test electrode should be left open.

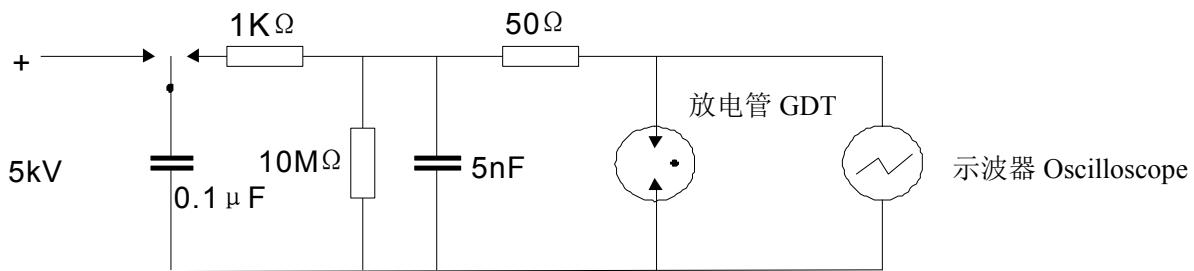


图 2 冲击击穿电压测试电路 Impulse Spark-over Voltage Test Circuit

## 7.3 绝缘电阻 Insulation Resistance

测试电压为直流 50V，测试短路电流应小于 10mA。绝缘电阻从产品电极间测得。与测试无关的电极应悬空。

The test voltage is DC 50V, testing short-circuit current should be less than 10mA. The insulation resistance is measured between the electrodes of product. Has nothing to do with the test electrode should be left open.

#### 7.4 极间电容 Electrode Capacitance

测试频率为 1MHz，测试电压为 0.5V。极间电容从产品电极间测得。与测试无关的电极应悬空。

The test frequency is 1MHz, test voltage is 0.5V. Electrode capacitance is measured between the electrodes of product. Has nothing to do with the test electrode should be left open.

#### 8. 放电管的工作环境条件 Gas Discharge Tube working conditions

温度： -40°C～+85°C。

Temperature: -40°C～+85°C.

相对湿度：最大 95%。

Relative humidity: MAX 95%.

#### 9. 测试的环境条件 The environmental conditions of the test

温度： 15°C～35°C。

Temperature: 15°C～35°C.

相对湿度： 45%～75%。

Relative humidity: 45%～75%.

#### 10. 产品包装 Product packing

产品采用吸塑包装盒包装，100PCS/盘，每包装箱包装 4000PCS。

Plastic box packaging 100PCS per box, 4000PCS per carton.