

产品规格承认书

SPECIFICATION FOR APPROVAL

客户名称:

CUSTOMER:

产品名称:

PRODUCT NAME:

气体放电管 GAS DISCHARGE TUBE

型 号:

MODEL:

4DS 300V

料 号:

PART NO.:

4DS300H

供应商:

深圳市良胜电子有限公司

惠州市良胜电子有限公司

SUPPLIER:

SHENZHEN LANSON ELECTRONICS CO., LTD. HUIZHOU LANSON ELECTRONICS CO., LTD.

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供方签章:

SUPPLIER:

日期:

DATE:2023.09.18

需方签章:

CUSTOMER:

日期:

DATE:

SHENZHEN LANSON ELECTRONICS CO.,LTD.	PRODUCT	EDITION NO.	A/0
	SPECIFICATION	FILE NO.	LS/C- 005-08
	MODEL: 4DS	PAGE	PAGE 1 OF 3

1. 适用范围 Scope of application

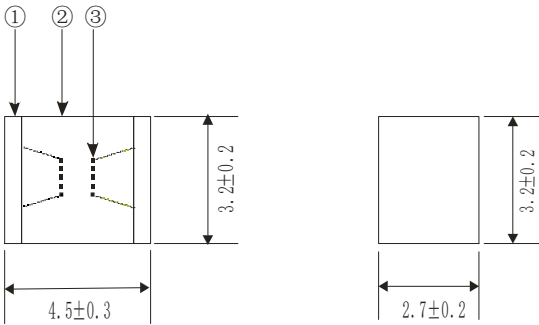
本产品适用于通信设备及其它各种电子设备的电路中起瞬时过电压保护作用，以免这些设备遭高电压及雷击破坏。

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》 .
- 2) UL497B SPD : E365642

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 Al_2O_3
③	电子粉 Electronic powder	硅酸钠等 Na_2SiO_3 etc

5. 编号说明 Number Description

4DS 300 H

(1) (2) (3)

- (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 2KA Resistance to 8/20μs Impulse Discharge Current 2KA

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6. 电气性能 Electrical characteristics

- 6.1 直流击穿电压：210-390V(测试条件：上升速率 100V/s)
DC Spark-over Voltage：210-390V(Test conditions：Rise speed 100V/s)
- 6.2 冲击击穿电压：≤1000V(测试条件：上升速率 1000V/μs)
Impulse spark-over voltage：≤1000V(Test conditions：Rise speed 1000V/μs)
- 6.3 绝缘电阻：≥1GΩ(测试条件：DC 100V)
Insulation Resistance：≥1GΩ(Test conditions：DC 100V)
- 6.4 极间电容：≤1.0 Pf(测试条件：1MHz 0.5V)
Electrode Capacitance：≤1.0Pf(Test conditions：1MHz 0.5V)
- 6.5 耐 8/20μs 短波冲击电流 2KA±5 次，间隔时间 60S
Resistance to 8/20μs Impulse Discharge Current 2KA±5times，Interval 60S
(Terms and current waveforms in accordance with ITU-T Rec.K.12; IEC61643-21)

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。
The test circuit is shown in Figure 1. The DC voltage rise speed of test power supply is100 V/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.

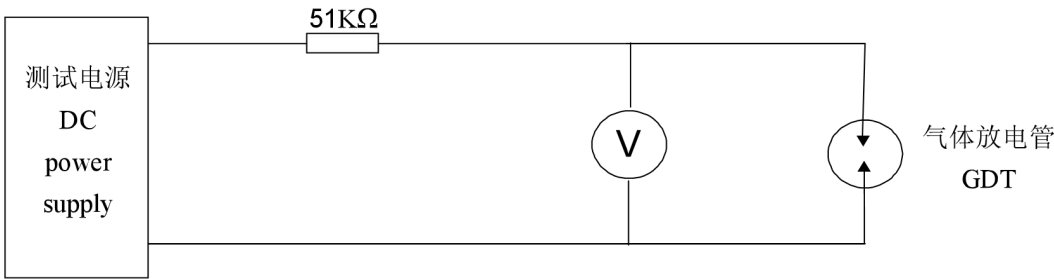


图 1 直流击穿电压测试电路 DC Spark-over Voltage Test Circuit

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 1KV/μs，产品的放电电极间都应测试正、反极性击穿电压。
The test circuit is shown in Figure 2. The test voltage rise speed of is 1KV/μs, The positive and reverse polarity spark-over voltage of product should be tested in discharge inter-electrode.

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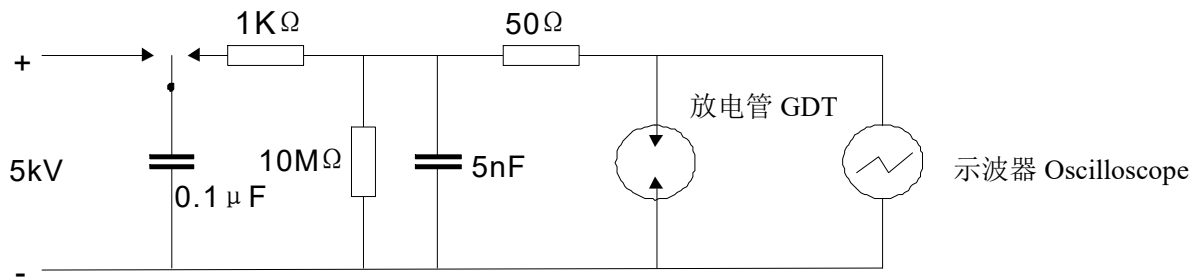


图 2 冲击击穿电压测试电路 Impulse Spark-over Voltage Test Circuit

7. 3 绝缘电阻 Insulation Resistance

测试电压为直流 100V，测试短路电流应小于 10mA。绝缘电阻从产品电极间测得。

The test voltage is DC 100V, testing short-circuit current should be less than 10mA. The insulation resistance is measured between the electrodes of product.
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。

The test frequency is 1MHz, test voltage is 0.5V. Electrode capacitance is measured between the electrodes of product.
8. 放电管的工作环境条件 Gas Discharge Tube working conditions

温度：-40℃～+125℃。

Temperature：-40℃～+125℃.

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℃～35℃。

Temperature：15℃～35℃.

相对湿度：45%～75%。

Relative humidity：45%～75%.
10. 产品包装 Product packing

产品采用编带卷盘包装，2500PCS/盘，每包装箱包装 15000PCS。

Automaton taped 2500PCS per reel, 15000PCS per carton.