# Shenzhen Socay Electronics Co., Ltd.

# DC Spark-over Voltage 100V/μs 150V±20% Gas Discharge Tube Φ8\*6mm **SC2E8-150ML For Surge Protection**

# **Basic Information**

• Place of Origin: Shenzhen, Guangdong, China

• Brand Name: SOCAY

· Certification: UL,REACH,RoHS,ISO

• Model Number: SC2E8-150ML

• Minimum Order

Quantity:

• Price:

Negotiable

1000PCS

• Delivery Time: 5-8 work days

• Supply Ability: 1000000



# **Product Specification**

• Mounting Type: THT

• Product Category: Gas Discharge Tube

Industrial Power Supply, Communication · Application:

> Power Supply, Inverter Power Supply, UPS Uninterrupted Power Supply, Regulated Power Supply, Driving Power Supply, Switching Power Supply, Power Module, Isolator, Inverter, Medical Equipment,

Disadvantages: 1. Since Gas Ionization Requires A Certain

> Amount Of Time, The Response Speed Is Slow. The Response Time Is Generally 0.2~0.3µs (200~300ns), And The Fastest Is About 0.1µs (100ns). Before It Is Turned On, There Will Be A Sharp Pulses With Larger

**Amplitudes** 

-40°C~+90°C • Storage Temperature:

# **Product Description:**

One of the significant advantages of the Gas Discharge Tube is its two-way symmetry characteristics. This feature allows the tube to function equally well in both forward and reverse directions, making it a versatile option for circuit protection. Additionally, the capacitance value of the Gas Discharge Tube is very small, less than 1.5pF, which ensures that it does not interfere with the circuit's normal operation.

The Gas Discharge Tube's peak current capacity is very high, ranging from 2.5kA to 100kA, making it ideal for use in industrial power supply, communication power supply, inverter power supply, UPS uninterrupted power supply, regulated power supply, driving power supply, switching power supply, power module, isolator, inverter, medical equipment, and other applications that require high surge protection. Another significant advantage of the Gas Discharge Tube is its resistance behavior. Before breakdown (conduction), it is equivalent to an open circuit, with a large resistance and no or very small leakage current. After breakdown (conduction), it is equivalent to a short circuit, which can pass a large current with a very small voltage drop. This characteristic makes the Gas Discharge Tube an effective surge protection device, preventing damage to the circuit due to overvoltage or overcurrent.

The Gas Discharge Tube has a nominal impulse discharge current of 10KA and a minimum insulation resistance of 1G $\Omega$  (@100V). These specifications ensure that the Gas Discharge Tube can withstand high-voltage surges while maintaining its reliability and performance.

#### Features:

Product Name: Gas Discharge Tube Min. Insulation Resistance: 1GΩ (@100V)

Disadvantages

Since gas ionization requires a certain amount of time, the response speed is slow. The response time is generally 0.2~0.3µs (200~300ns), and the fastest is about 0.1µs (100ns). Before it is turned on, there will be a Sharp pulses with larger amplitudes leak through and have no protective effect;

The breakdown voltage has poor consistency and large dispersion, generally ±20%;

The breakdown voltage has only a few specific values;

Max. Spark-over Impulse Voltage @1KV/µs: 600V

Advantages:

Before breakdown (conduction), it is equivalent to an open circuit, with a large resistance and no or very small leakage current;

After breakdown (conduction), it is equivalent to a short circuit, which can pass a large current with a very small voltage drop;

The pulse current capacity (peak current) is very large; 2.5kA~100kA;

It has two-way symmetry characteristics;

The capacitance value is very small, less than 1.5pF.

Max. Spark-over Impulse Voltage @100V/ $\mu$ s: 500V

GDT surge protection

#### **Technical Parameters:**

| DC<br>Spark-<br>over<br>Voltage<br>@100V/µ<br>s              | 150V±20%  |
|--|---|
| Mounting<br>Type   | ТНТ   |
| Max.<br>Spark-<br>over<br>Impulse<br>Voltage<br>@100V/µ<br>s | 500V  |
| Applicatio<br>n  | Industrial power supply, communication power supply, inverter power supply, UPS uninterrupted power supply, regulated power supply, driving power supply, switching power supply, power module, isolator, inverter, medical equipment |
| Storage<br>Temperat<br>ure                                   | -40°C~+90°C   |

| Max.<br>Impulse<br>Discharge<br>Current | 20KA  |
|---|---|
| Min.<br>Insulation<br>Resistanc<br>e    | 1GΩ (@100V)   |
| Disadvant<br>ages                       | 1. Since gas ionization requires a certain amount of time, the response speed is slow. The response time is generally 0.2~0.3µs (200~300ns), and the fastest is about 0.1µs (100ns). Before it is turned on, there will be a Sharp pulses with larger amplitudes leak through and have no protective effect; 2. The breakdown voltage has poor consistency and large dispersion, generally ±20%; 3. The breakdown voltage has only a few specific values; |
| Product<br>Name                         | Lightning Arrester Axial Leaded Ceramic Gas Discharge Tube 600V SC2E8-150ML GDT Electronic Component  |
| Length                                  | φ8*6mm  |

This Gas Discharge Tube product is designed as a circuit board protection and is a type of gas discharge tube surge protector or GDT surge protection. It can be used in various applications such as industrial power supply, communication power supply, inverter power supply, UPS uninterrupted power supply, regulated power supply, driving power supply, switching power supply, power module, isolator, inverter, medical equipment. It has a DC Spark-over Voltage of 150V $\pm$ 20%, Max. Spark-over Impulse Voltage of 500V, Max. Impulse Discharge Current of 20KA, and Min. Insulation Resistance of 1G $\Omega$  (@100V).

# **Applications:**

The SOCAY SC2E8-150ML Gas Discharge Tube is manufactured in Shenzhen, Guangdong, China, and has a minimum order quantity of 1000PCS. It has a delivery time of 5-8 work days and a negotiable price. The product is in high demand, with a supply ability of 1000000 units.

The SOCAY SC2E8-150ML Gas Discharge Tube has a maximum spark-over impulse voltage of 600V @1KV/ $\mu$ s and 500V @100V/ $\mu$ s. It also has a nominal impulse discharge current of 10KA, making it suitable for a wide range of applications. The gas discharge tube has a length of  $\phi$ 8\*6mm, making it compact and easy to install.

The SOCAY SC2E8-150ML Gas Discharge Tube is used in a variety of applications, including:

Telecommunications equipment

Power supplies

Computers and peripherals

Industrial controls

Medical equipment

Security systems

The SOCAY SC2E8-150ML Gas Discharge Tube is ideal for applications that require reliable protection against voltage surges and transients. Its excellent performance and high reliability make it a popular choice for designers and engineers.

# **Support and Services:**

Our Gas Discharge Tube product line comes with comprehensive technical support and services to help you with any questions or concerns you may have:

Technical documentation and datasheets

Design-in support

Customization options

Product training and education

Product samples for testing and evaluation

Product warranty and repair services

Our team of experts is dedicated to providing you with the best possible support and service to ensure the success of your project.

### Packing and Shipping:

Product Packaging:

The gas discharge tube will be packed in a sturdy cardboard box.

The box will be labeled with the product name, specifications, and quantity.

Each gas discharge tube will be individually wrapped in bubble wrap to prevent damage during transport.

Shipping:

The gas discharge tubes will be shipped via a reputable courier service.

Shipping charges will be calculated based on the destination and weight of the package.  $\label{eq:calculated}$ 

A tracking number will be provided to the customer once the package has been shipped.

The estimated delivery time will depend on the destination and shipping method selected.

#### FAQ:

Here are the frequently asked questions and answers for the Gas Discharge Tube product:

- Q: What is the brand name of this product?
- A: The brand name of this product is SOCAY.
- Q: What is the model number of this product?
- A: The model number of this product is SC2E8-150ML.
- Q: What certifications does this product have?
- A: This product has UL, REACH, RoHS, and ISO certifications.
- Q: Where is this product manufactured?
- A: This product is manufactured in Shenzhen, Guangdong, China.
- Q: What is the minimum order quantity for this product?
- A: The minimum order quantity for this product is 1000PCS. Q: What is the delivery time for this product?
- A: The delivery time for this product is 5-8 work days.
- Q: Is the price of this product negotiable?
- A: Yes, the price of this product is negotiable.
- Q: What is the supply ability of this product?
- A: The supply ability of this product is 1000000.





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