

Surge protection components such as gas discharge tubes (GDT) are commonly used in network applications. Eliminating gas tubes (or ceramic tubes) and special gas that are essential for the conventional gas discharge tubes, Firstohm SGS Spark-Gap Surge Absorber would help reduce surge protection related costs in a network setup.

## ■ DIMENSIONS

Type	Body Length (L, mm)	Body Diameter (D, mm)	Lead Wire Length (H, mm)	Lead Wire Diameter (d, mm)	Net Weight Per 1000 Pcs
SGS207	6.7 ± 1.0	2.4 ± 0.2	26 ± 3.0	0.55 ± 0.03	220 grams

## ■ GENERAL SPECIFICATIONS

Series	Type Name	Color Code	DC Spark-Over Voltage
SGS207	SGS207R	White-Red	1550V ± 30%
	SGS207Y	White-Yellow	2300V ± 30%
	SGS207V	White-Violet	3300V ± 30%

## ■ TECHNICAL SUMMARY

Characteristics	Limits
Dielectric Withstanding Voltage, VAC or DC	500
Surge Current Capacity	2000A
Operating Temperature Range, °C	-55 ~ +155°C
Insulation Resistance, MΩ (Measured with DC 500V)	> 100
Capacitance	≤1pF

## Advantages of Firstohm SGS series:

- Low-cost patented construction
- No light-dark effect
- Low capacitance / Short response time / Fast ignition
- RoHS / REACH Compliant

Application areas of SGS Spark-Gap Surge Absorber include **(1) differential-mode protection, (2) protection against common-mode voltage interference and (3) series connection with varistors.** Patents have been granted to Firstohm SGS series in following locations: Europe (patent no.EP2211357), Japan (patent no.3174088), mainland China (patent no.ZL 2010 90000662.4) and Korea. Patents in other countries are still under review.

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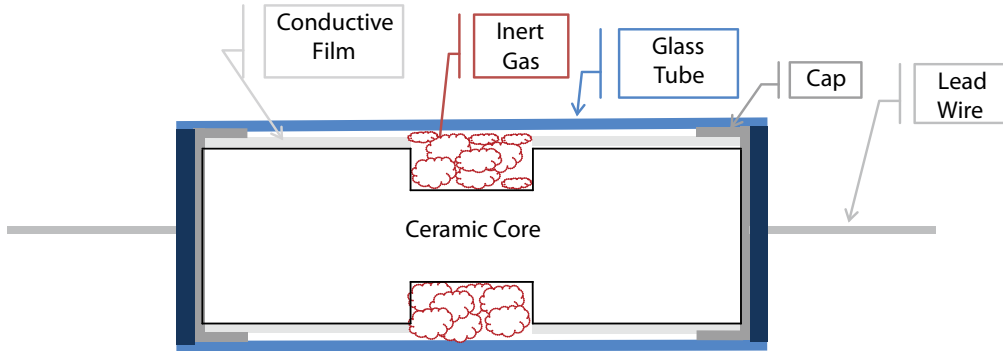
TEL: +886 2 2705 1878 FAX: +886 2 2703 6701

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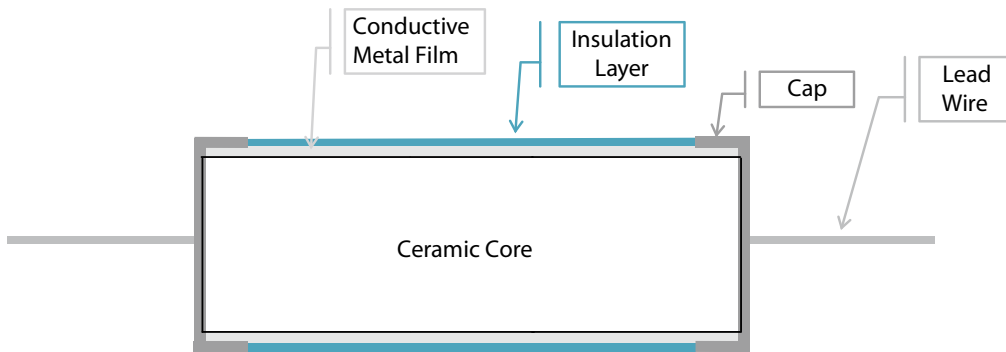
Quality • Reliability  
Cost-Down via Technology

## ■ STRUCTURE OF A CONVENTIONAL GAS DISCHARGE TUBE

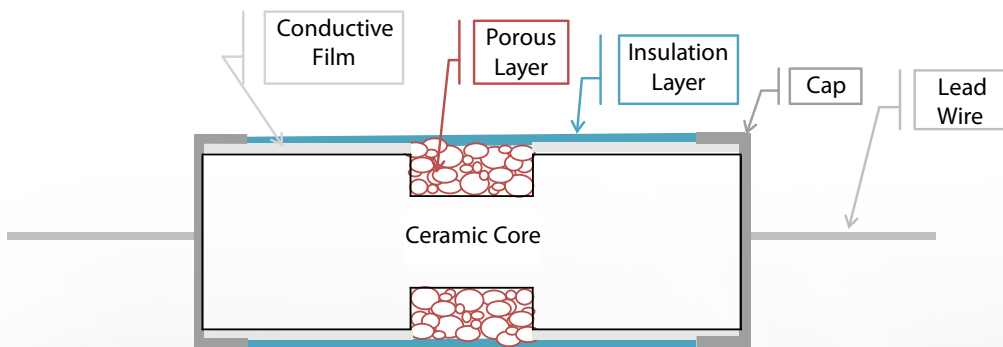


## ■ EVOLVEMENT OF FIRSTOHM SPARK-GAP SURGE ABSORBER (SGS):

Graphic 1: Structure of a typical Metal Film Resistor



Graphic 2: Structure of Spark - Gap Surge Absorber (SGS)



Graphic 3: How does Firstohm Spark - Gap Surge Absorber work?

