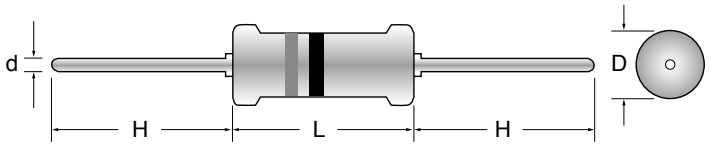
SGS
Spark-Gap Surge Absorber

Quality • Reliability
Cost-Down via Innovation.



Features

- Low-cost patented construction (EP 09000962.2)
- No light-dark effect
- Low capacitance / short response time / fast ignition
- Products meet RoHS requirements and do not contain substances of very high concern identified by European Chemicals Agency

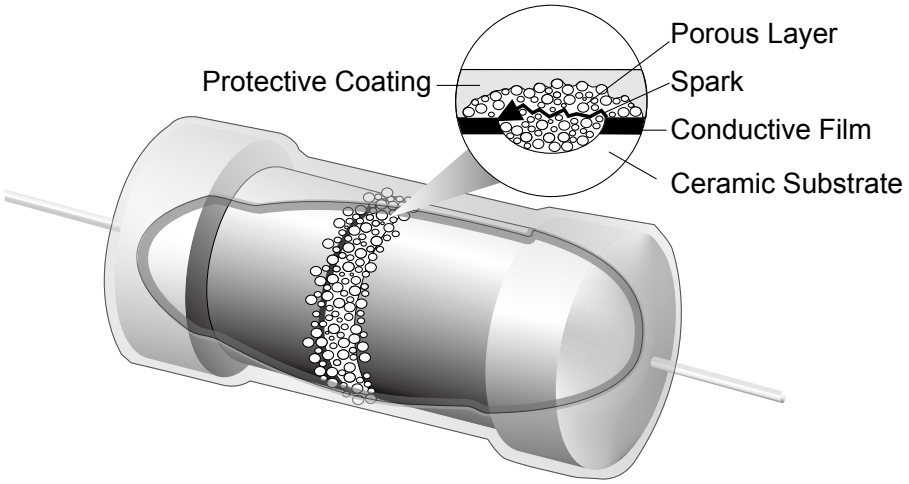
Applications

- Telephone/Fax Machine/Modem Protection
- Signal Line Protection

DIMENSIONS

Type	Body Length (L, mm)	Body Diameter (D, mm)	Lead Wire Length (H, mm)	Lead Wire Diameter (d, mm)	Net Weight Per 1000Pcs
SGS207	6.5 ± 1.0	2.4 ± 0.2	26 ± 3.0	0.55 ± 0.03	220 grams

Cross-Section View



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%

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PART NUMBER

Example: SGS207RN1550XXXTB5K0

SGS207R	N	1550	XXX	TB5K0
Type	Tolerance	Spark-Over Voltage	TCR	Packaging
	N (30%)	1550V **4-character code** SGS207R: 1550V SGS207Y: 2300V SGS207V: 3300V	**3-character code** Parameter Not Applicable	**5-character code** TB = Tape Box (pieces per box) 5K0 = 5,000

TECHNICAL SUMMARY

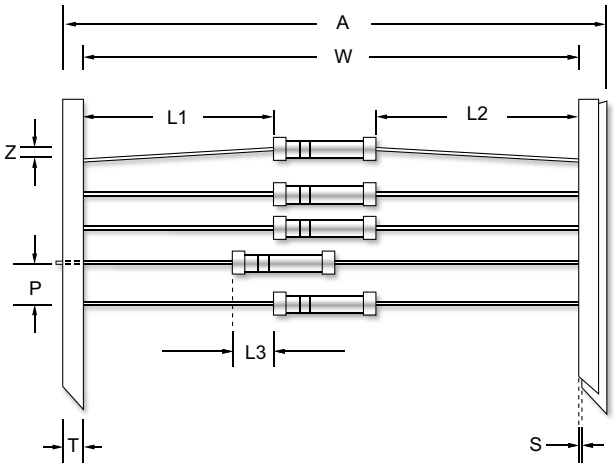
Characteristics	Limits
Dielectric Withstanding Voltage, VAC or DC	500
Surge Current Capacity	60A @8/20μs (80A @2/10μs)
Operating Temperature Range, °C	-55 ~ + 155
Insulation Resistance, MΩ (Measured with DC 500V)	> 100
Capacitance	≤1pF

PERFORMANCE SPECIFICATIONS

Characteristics	Test Conditions	Limits
Resistance To Soldering Heat	**IEC 60115-1 4.18.2** Leads immersed till 3mm from the body in (260±5)°C solder for 10±1 seconds	Rated values 40%
Solderability	**IEC 60115-1 4.17.2** Solder area covered after 230±5°C/5+0.5 seconds with flux applied	95% min
Vibration	**IEC 60115-1 4.22** Six hours in each parallel and axial direction with a simple harmonic motion having an amplitude of 1.52mm and 10 to 2,000 Hz.	Rated values still satisfied
Thermal Endurance	**IEC 60115-1 4.25.3** 1000 hours at 155°C without load	Rated values 40%
Thermal Shock	**IEC 60115-1 4.19** -55°C 30minutes, +155°C 30minutes, 5 cycles	Rated values 40%
Surge Life	3000pF/ 10KV/ 0ohm, times = 300	No function failure
Bending strength	Bend lead wire, at a point 5mm apart from the root, parpendicularly to its axis by means of a 2.45N load and restore it. Repeat this step twice and check whether it has any apparent abnomality.	Rated values still satisfied

SGS Spark-Gap Surge Absorber / Arrester

TAPING/PACKING SPECIFICATIONS



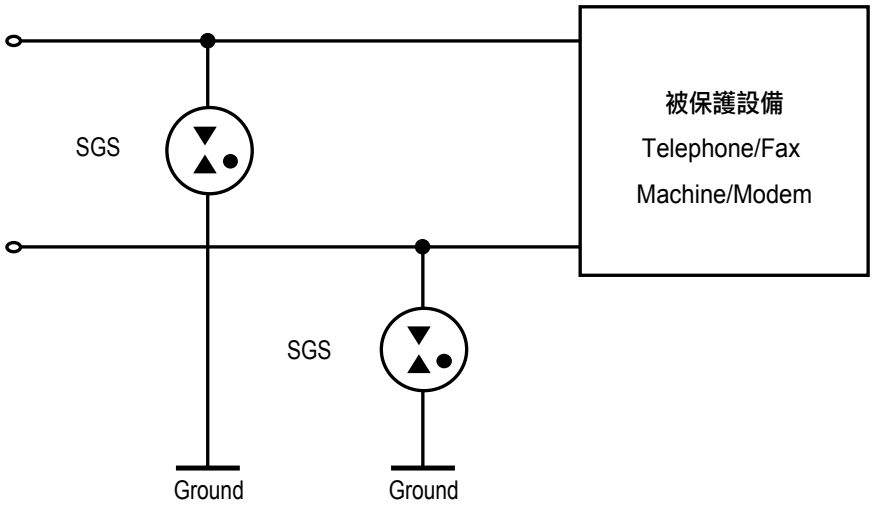
Unit (mm)

Series	A (Max.)	L1-L2 (Max.)	L3 (Max.)	P ±0.5	S (Max.)	T ±0.5	W ±1.5	Z (Max.)
SGS207	65	±1.0	0.5	5.0	0.8	6.0	52.5	1

Type	Packing Type	Minimum Packing QTY (pcs)
SGS207	Ammo Pack	5000

APPLICATIONS

Telephone/Fax Machine/Modem Protection (common-mode protection)



These SGS absorbers protect against common-mode interference voltages, i.e. surge voltages that appear in both exchange lines connecting to the ground. In the event of voltage overload, the SGS protects both exchange lines by conducting the surge current away to the ground.

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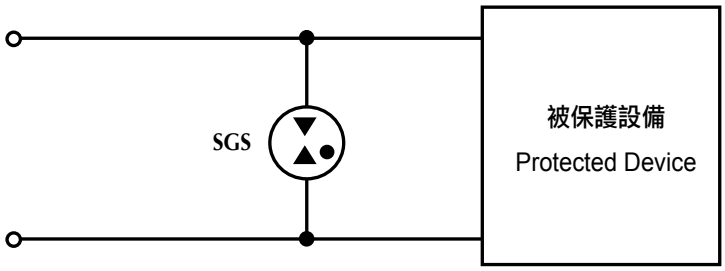
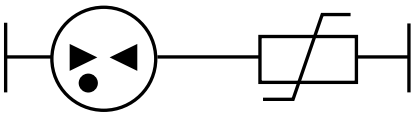
APPLICATIONS

Signal Line Protection (differential-mode protection)



Signal circuits often run with no ground conductor. A SGS circuit located between the two signal lines offers differential mode protection by preventing the occurrence of large potential difference at the input of the equipment to be protected

Series of Spark-Gap Surge Absorber (SGS) and Metal-Oxide Varistor (MOV)



Benefits:
1. Capacitance of this branch circuit would be reduced to pF level.
2. MOV has almost no current leakage.
3. MOV aging-related issue would be greatly improved,, increasing reliability of the circuit.