

8x10mm No. A450/A451/A452

This product is not recommended for new designs. Please refer to Littelfuse series SL1021A.



3-electrode (20kA/10A) Enhanced Discharge Series

Features

- Non-radioactive
- Lead Free
- Failsafe Option

Applications

- Telecommunication
- Data Transmission
- Subscriber protection
- Underground cables

Standard

- UL-497B
- complies to ITU-T K.12 (formerly CCITT)
- complies to DIN 57845/VDE 0845

Approvals

- UL-rec.

WebLinks

- Further info see:
http://www.wickmanngroup.com/download/orderinfo_surgearr.pdf
http://www.wickmanngroup.com/download/crossref_surgearr.pdf

Specifications

Packaging

- A450: 00=Bulk (2.000 pcs.)
- A450/F: 00_Bulk (500 pcs.)
- A451: 04=Tray (250 pcs.)
- A452/F: 04=Tray (500 pcs.)

Materials

- Housing: Ceramic
- Gas: non-radioactive
- Leads: tin plated

Arc Voltage @ 1A

~ 35V

Transition Glow to Arc @

~ 1.0A

Operating temperature

-40°C to +90°C

Climatic Category

- complies to IEC 60068-1
- +40°C, 21 days, <93% humidity

Soldering characteristics

- complies to IEC 60068-2-20

Soldering Heat Resistance

- complies to IEC 60068-2-58

Transverse Delay Time

- complies to ITU-T K.12
- < 0.2µs

Marking

- Ⓜ, Type, Nom. Voltage, Date

Unit Weight

ca. 2.5g



Characteristics

| Type/ Order Code | DC sparkover voltage | Tolerance | Impulse sparkover voltage (1kV/µs) typ. | Glow Voltage | Insulation Resistance (@100 Vdc) | Capacitance (@1MHZ) | 8/20µs Nominal Impulse Discharge Current (10 times) E1+E2/M | 8/20µs Single Impulse Discharge Current (1 time) E1+E2/M | AC Nominal Discharge Current (50Hz; 1s; (10 times) E1+E2/M | AC Alternating Discharge Current (50Hz; (9 cycles) E1+E2/M | Approval |
|--|----------------------------|-----------|---|-----------------|--|------------------------|---|--|--|--|----------|
| A450 S0 0230 01 00 A450 F0 0230 01 00** A451 S0 0230 01 04 A452 S0 0230 01 04 A452 F0 0230 01 04** | 230V | +/- 20% | < 450V | ~ 200V | > 10GΩ | < 1.5 pF | 20kA | 25kA | 10A | 50A | • |
| A450 S0 0250 01 00** A451 S0 0250 01 04 A452 S0 0250 01 04 A452 F0 0250 01 04** | 250V | +/- 20% | < 550V | ~ 200V | > 10GΩ | < 1.5 pF | 20kA | 25kA | 10A | 50A | • |
| A450 S0 0350 01 00 A451 S0 0350 01 04 A452 S0 0350 01 04 A452 F0 0350 01 04** | 350V | +/- 20% | < 600V | ~ 200V | > 10GΩ | < 1.5 pF | 20kA | 25kA | 10A | 50A | • |
| A450 S0 0420 11 00 A450 F0 0420 11 00** A452 S0 0420 11 04 | 420V | -17/+30% | < 800V | ~ 200V | > 10GΩ | < 1.5 pF | 20kA | 25kA | 10A | 50A | |

other values on request

** with failsafe

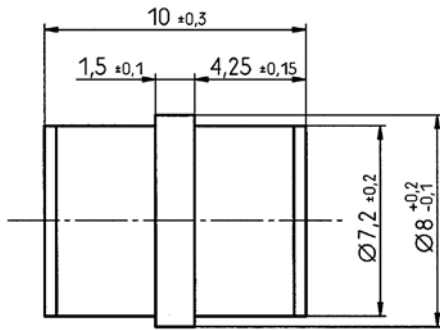
Specifications are subject to change without notice.

Order Example

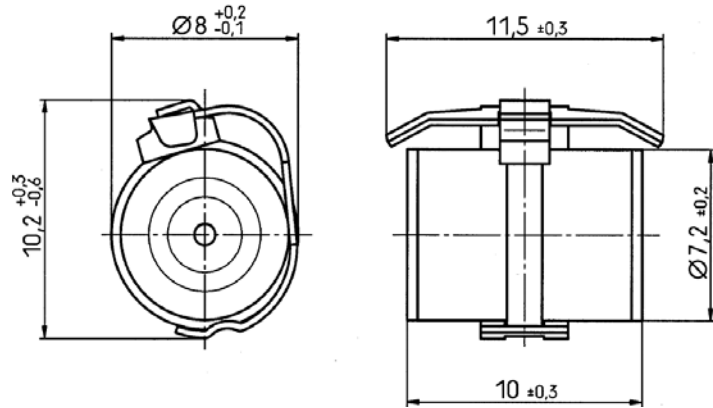
| Qty. | Order- Number | Type | Failsafe Option | Sparkover Volt. | Tolerance | Packaging |
|------|------------------|------|-----------------|-----------------|-----------|-----------|
| | | A450 | S0 | 0230 | 01 | 00 |

Dimensions (mm) A450/A451/A452

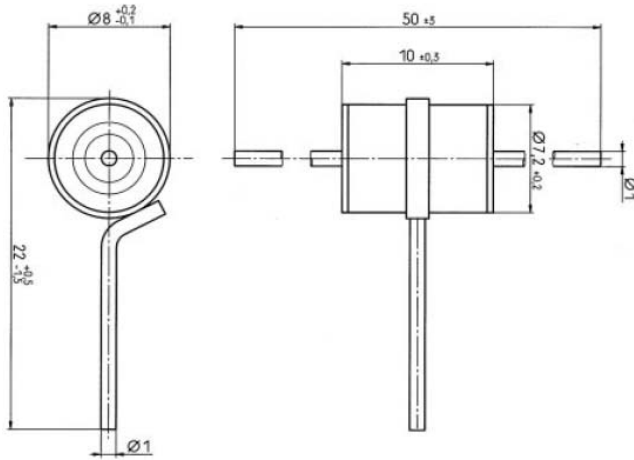
A450



A450 with Failsafe



A451



A452 with Failsafe

A452

