



8x10mm
No. A440/A441/A442

This product is not recommended for new designs. Please refer to Littelfuse series SL1024A.



3-electrode (10kA/10A)
Standard 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

- A440: 00=Bulk (2.000 pcs.)
- A440/F: 00=Bulk (500 pcs.)
- A441: 04=Tray (250 pcs.)
- A442: 04=Tray (500 pcs.)
- A442/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

W, Type, Nom. Voltage, Date

Unit Weight

ca. 2.2g



Characteristics

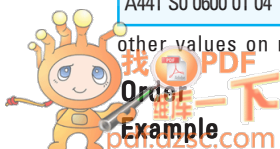
| Type/ Order Code | DC sparkover voltage | Tolerance | Impulse sparkover voltage (1kV/µs) typ. | Glow Voltage | Insulation Resistance (@100 Vdc or @50Vdc for 90V) E1/M;E2/M | Capacitance (@1MHZ) E1/M;E2/M | 8/20µs Nominal Impulse Discharge Current (10 times) E1+E2/M | 8/20µs Single Impulse Discharge 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 |
|--|----------------------------|-----------|---|-----------------|--|-------------------------------------|---|--|--|---|----------|
| A440 SO 0090 01 00 A441 SO 0090 01 04 A442 SO 0090 01 04 A442 FO 0090 01 04* | 90V | +/- 20% | < 450V | ~ 60V | > 10GΩ | < 1.5 pF | 10kA | 15kA | 10A | 40A | • |
| A440 SO 0230 01 00 A440 FO 0230 01 00* A441 SO 0230 01 04 A442 SO 0230 01 04 A442 FO 0230 01 04* | 230V | +/- 20% | < 550V | ~ 200V | > 10GΩ | < 1.5 pF | 10kA | 15kA | 10A | 40A | • |
| A440 FO 0250 01 00* | 250V | +/- 20% | < 550V | ~ 200V | > 10GΩ | < 1.5 pF | 10kA | 15kA | 10A | 40A | • |
| A440 SO 0350 01 00 A440 FO 0350 01 00* A441 SO 0350 01 04 A442 FO 0350 01 04* | 350V | +/- 20% | < 800V | ~ 200V | > 10GΩ | < 1.5 pF | 10kA | 15kA | 10A | 40A | • |
| A440 FO 0420 01 00* | 420V | +/- 20% | < 850V | ~ 200V | > 10GΩ | < 1.5 pF | 10kA | 15kA | 10A | 40A | • |
| A440 SO 0600 01 00 A441 SO 0600 01 04 | 600V | +/- 20% | < 1000V | ~ 200V | > 10GΩ | < 1.5 pF | 10kA | 15kA | 10A | 40A | • |

other values on request

* with failsafe

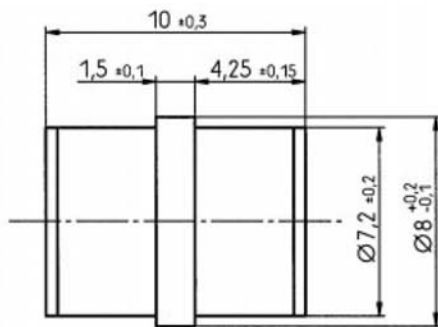
Specifications are subject to change without notice.

| Qty. | Order- Number | Type | Failsafe Option | Sparkover Volt. | Tolerance | Packaging |
|------|------------------|------|-----------------|-----------------|-----------|-----------|
| | | A420 | SO | 0090 | 01 | 00 |

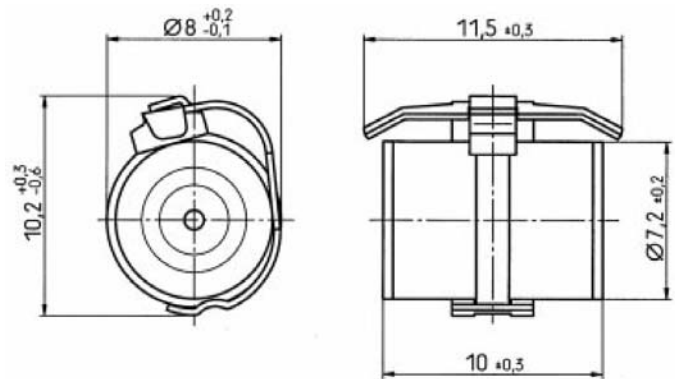


Dimensions (mm) A440/A441/A442

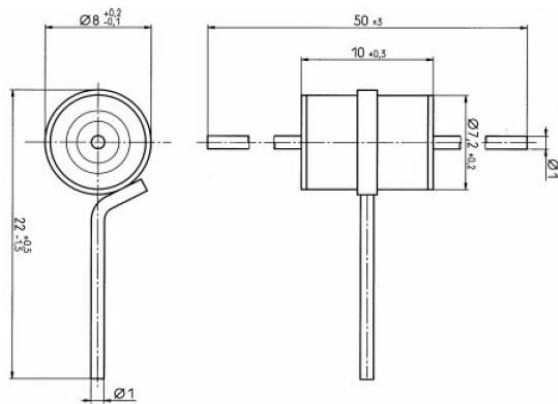
A440



A440 with Failsafe



A441



A442 with Failsafe

A442

