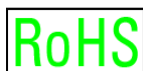


8x10mm

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

Ⓜ, 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

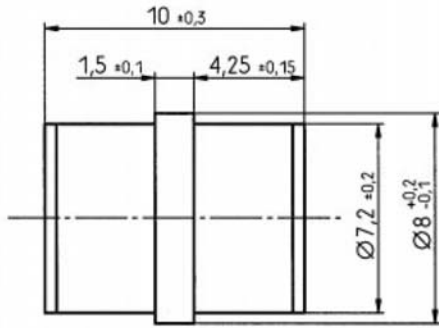
Specifications are subject to change without notice.

Order Example

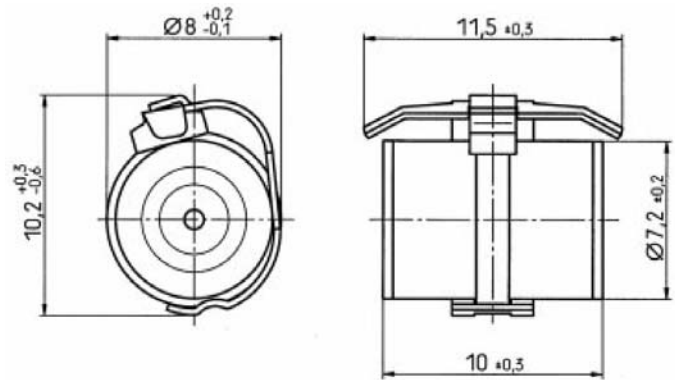
Qty.	Order- Number	Type	Failsafe Option	Sparkover Volt.	Tolerance	Packaging
		A420	SO	0090	01	00

Dimensions (mm) A440/A441/A442

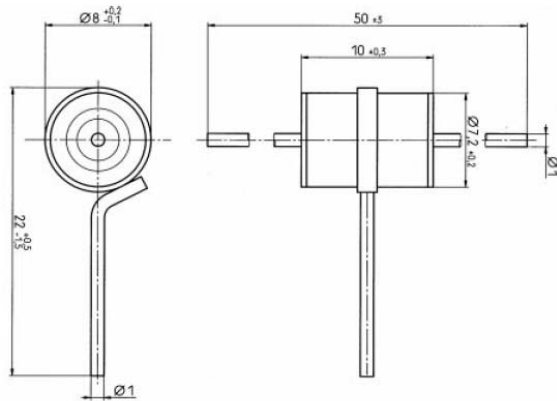
A440



A440 with Failsafe



A441



A442 with Failsafe

A442

