

9,5x11,5mm

No. A470/A471/A472

This product is not recommended  
for new designs. Please refer to  
Littelfuse series SL1024B.

3-electrode (20kA/20A)

High 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/orderinfo_surgearr.pdf)  
[http://www.wickmanngroup.com/  
download/crossref\\_surgearr.pdf](http://www.wickmanngroup.com/download/crossref_surgearr.pdf)



RoHS



## Specifications

## Packaging

A470: 00=Bulk (2.000 pcs.)  
A471: 00=Bulk (100 pcs.)  
A472: 04=Tray (100 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. 3.0g

## Characteristics

| Type/<br>Order Code<br>voltage                                 | DC<br>sparkover | Tolerance<br>voltage | Impulse<br>sparkover<br>(1kV/μs)<br>typ. | Glow<br>Voltage<br>(@100 Vdc) | Insulation<br>Resistance<br><br>E1/M;E2/M | Capacitance<br>(@1MHZ)<br>Impulse<br><br>E1/M;E2/M | 8/20μs<br>Nominal<br>Impulse<br>Discharge<br>Current<br>(10 times)<br>E1+E2/M | 8/20μs<br>Single<br>Discharge<br>Discharge<br>Current<br>(1 time)<br>E1+E2/M | AC<br>Nominal<br>Discharge<br>Current<br>(50Hz; 1s;<br>(10 times)<br>E1+E2/M | AC<br>Alternating<br>Current<br>(50Hz;<br>9 cycles)<br>E1+E2/M | Approval |
|----------------------------------------------------------------|-----------------|----------------------|------------------------------------------|-------------------------------|-------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------|----------|
| A470 S0 0260 01 00                                             | 260V            | +/- 20%              | < 200V                                   | ~ 200V                        | > 10GΩ                                    | < 1.5 pF                                           | 20kA                                                                          | 30kA                                                                         | 20A                                                                          | 130A                                                           |          |
| A470 S0 0350 13 00<br>A471 S0 0350 13 04<br>A472 S0 0350 13 04 | 350V            | -15%/+40%            | < 200V                                   | ~ 200V                        | > 10GΩ                                    | < 1.5 pF                                           | 20kA                                                                          | 30kA                                                                         | 20A                                                                          | 130A                                                           | •        |
| A470 S0 0600 01 00<br>A471 S0 0600 01 04<br>A472 S0 0600 01 04 | 600V            | +/- 20%              | < 200V                                   | ~ 200V                        | > 10GΩ                                    | < 1.5 pF                                           | 20kA                                                                          | 30kA                                                                         | 20A                                                                          | 130A                                                           | •        |
| A470 S0 0650 12 00<br>A471 S0 0650 12 04<br>A472 S0 0650 12 04 | 650V            | +/- 25%              | < 200V                                   | ~ 200V                        | > 10GΩ                                    | < 1.5 pF                                           | 20kA                                                                          | 30kA                                                                         | 20A                                                                          | 130A                                                           | •        |

other values on request

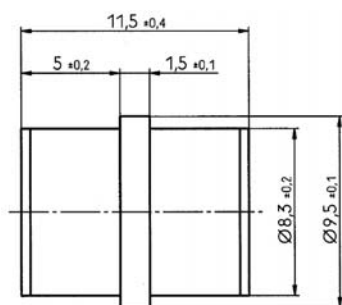
Specifications are subject to change without notice.

Order  
Example

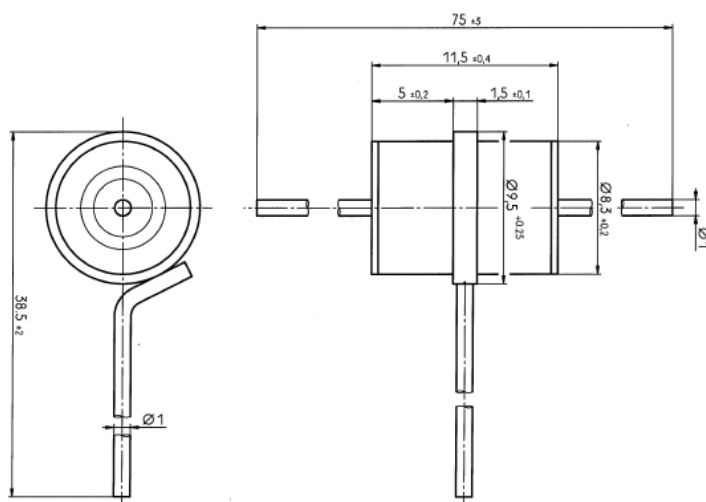
| Qty. | Order-<br>Number | Type | Failsafe Option | Sparkover Volt. | Tolerance | Packaging |
|------|------------------|------|-----------------|-----------------|-----------|-----------|
|      |                  | A470 | SO              | 0260            | 01        | 00        |

## Dimensions (mm) A470/A471/A472

### A470



### A471



### A472

