

# 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)

## 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 | DC<br>sparkover<br>voltage | Tolerance<br>voltage | Impulse<br>sparkover<br>(1kV/µs)<br>typ. | Glow<br>Voltage<br>(@100 Vdc) | Insulation<br>Resistance<br>E1/M;E2/M | Capacitance<br>(@1MHz)<br>Impulse<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>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 SO 0260 01 00  | 260V                       | +/- 20%              | < 200V                                   | ~ 200V                        | > 10GΩ                                | < 1.5 pF                                       | 20kA                                                                          | 30kA                                                            | 20A                                                                          | 130A                                                           | UL-rec.  |
| A470 SO 0350 13 00  | 350V                       | -15%/+40%            | < 200V                                   | ~ 200V                        | > 10GΩ                                | < 1.5 pF                                       | 20kA                                                                          | 30kA                                                            | 20A                                                                          | 130A                                                           | •        |
| A471 SO 0350 13 04  |                            |                      |                                          |                               |                                       |                                                |                                                                               |                                                                 |                                                                              |                                                                |          |
| A472 SO 0350 13 04  |                            |                      |                                          |                               |                                       |                                                |                                                                               |                                                                 |                                                                              |                                                                |          |
| A470 SO 0600 01 00  | 600V                       | +/- 20%              | < 200V                                   | ~ 200V                        | > 10GΩ                                | < 1.5 pF                                       | 20kA                                                                          | 30kA                                                            | 20A                                                                          | 130A                                                           | •        |
| A471 SO 0600 01 04  |                            |                      |                                          |                               |                                       |                                                |                                                                               |                                                                 |                                                                              |                                                                |          |
| A472 SO 0600 01 04  |                            |                      |                                          |                               |                                       |                                                |                                                                               |                                                                 |                                                                              |                                                                |          |
| A470 SO 0650 12 00  | 650V                       | +/- 25%              | < 200V                                   | ~ 200V                        | > 10GΩ                                | < 1.5 pF                                       | 20kA                                                                          | 30kA                                                            | 20A                                                                          | 130A                                                           | •        |
| A471 SO 0650 12 04  |                            |                      |                                          |                               |                                       |                                                |                                                                               |                                                                 |                                                                              |                                                                |          |
| A472 SO 0650 12 04  |                            |                      |                                          |                               |                                       |                                                |                                                                               |                                                                 |                                                                              |                                                                |          |

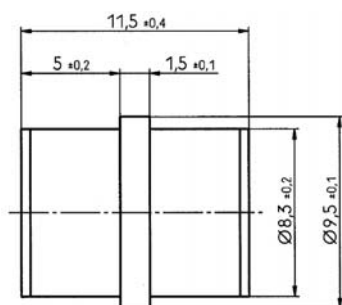
other values on request

Specifications are subject to change without notice.

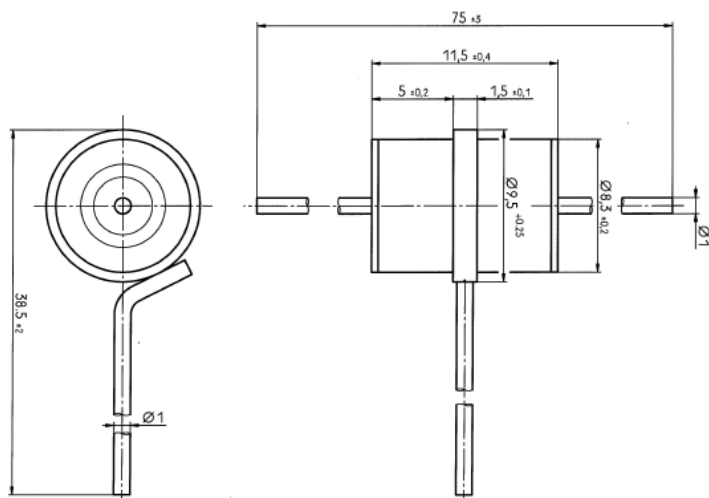
| Qty. | Order-<br>Number | Type | Failsafe Option | Sparkover Volt. | Tolerance | Packaging |
|------|------------------|------|-----------------|-----------------|-----------|-----------|
|      |                  | A470 | SO              | 0260            | 01        | 00        |

## Dimensions (mm) A470/A471/A472

### A470



### A471



### A472

