# CN-LAMBDA/4-2.25-SB - Surge protection device

2801056

https://www.phoenixcontact.com/us/products/2801056

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Attachment plug with Lambda/4 technology as surge protection for coaxial signal interfaces.
Connection: N connectors plug/socket

## Your advantages

- High HF power in the kW range
- Maintenance-free surge protection with LAMBDA/4 technology
- Low protection level

ELEKTROGERÄTE RÜCKNAHME

## Commercial data

| | |
|---|---|
| Item number | 2801056 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | CL26 |
| Product key | CL3312 |
| GTIN | 4046356678247 |
| Weight per piece (including packing) | 296 g |
| Weight per piece (excluding packing) | 260 g |
| Customs tariff number | 85363010 |
| Country of origin | CN |

## Technical data

### Product properties

| | |
|---|---|
| Product type | Surge protection for transceiver systems |
| IEC test classification | C2 |
| | C3 |
| | D1 |
| VDE requirement class | C2 |
| | C3 |
| | D1 |
| Type | Intermediate plug |
| Number of positions | 1 |
| Surge protection fault message | none |

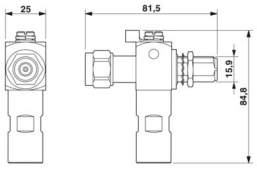
Insulation characteristics

| | |
|---|---|
| Overvoltage category | III |
| Pollution degree | 2 |

### Connection data

| | |
|---|---|
| Connection method | N connector 50 Ω |
| Tightening torque | 1.5 Nm |

### Dimensions

| | |
|---|---|
| Dimensional drawing |  |
| Width | 25 mm |
| Height | 77.5 mm |
| Length | 81.5 mm |

### Material specifications

| | |
|---|---|
| Color | nickel color |
| | black (RAL 9005) |
| Housing material | HPb59-1 |
| Housing surface material | Cu-Sn-Zn |
| Contact surface material | Au |
| Inner conductor material | QSn6.5-0.1 |
| Inner conductor surface material | Gold |
| Insulation body material | PTFE |
| Spring contact material | QSn6.5-0.1 |

## Mechanical properties

Mechanical data

| | |
|---|---|
| Open side panel | No |

## Protective circuit

| | |
|---|---|
| Direction of action | Line-Shield/Earth Ground |
| Rated current | 5 A (25 °C) |
| Nominal discharge current $I_n$ (8/20) µs (line-ground) | 50 kA |
| Nominal discharge current $I_n$ (8/20) µs (line-shield) | 50 kA |
| Pulse discharge current $I_{imp}$ (10/350) µs | 20 kA |
| Total surge current (8/20) µs | 60 kA |
| Total surge current (10/350) µs | 20 kA |
| Total discharge current $I_{Total}$ (8/20) µs | 60 kA |
| Max. discharge current $I_{max}$ (8/20) µs maximum (line-earth) | 60 kA |
| Max. discharge current $I_{max}$ (8/20) µs maximum (line-shield) | 60 kA |
| Output voltage limitation at 1 kV/µs (line-earth) spike | ≤ 1 V |
| Output voltage limitation at 1 kV/µs (line-shield) spike | ≤ 1 V |
| Output voltage limitation at 1 kV/µs (line-earth) static | ≤ 1 V |
| Voltage protection level $U_p$ (line-earth) | ≤ 5 V (C1 - 1 kV / 500 A) |
| | ≤ 25 V (C2 - 10 kV / 5 kA) |
| | ≤ 15 V (6 kV / 3 kA) |
| Voltage protection level $U_p$ (line-shield) | ≤ 5 V (C1 - 1 kV / 500 A) |
| | ≤ 25 V (C2 - 10 kV / 5 kA) |
| | ≤ 15 V (6 kV / 3 kA) |
| Input attenuation aE, asym. | ≤ 0.2 dB (50 Ω) |
| Frequency range | 0.8 GHz ... 2.25 GHz |
| Voltage standing wave ratio VSWR in a 50 Ω system | typ. 1.20 |
| | max. 1.25 |
| Permissible HF power $P_{max}$ at VSWR = xx (50 ohm system) | ≤ 500 W |
| | ≤ 4 kW (peak) |
| Surge protection fault message | none |
| Impulse durability (line-earth) | C1 - 1 kV / 500 A |
| | C2 - 10 kV / 5 kA |
| | D1 - 2.5 kA |

## Environmental and real-life conditions

Ambient conditions

| | |
|---|---|
| Degree of protection | IP68 |
| Ambient temperature (operation) | -40 °C ... 85 °C |
| Altitude | 2000 m |

## Standards and regulations

| | |
|---|---|
| VDE requirement class | C2 |
| | C3 |
| | D1 |

Air clearances and creepage distances

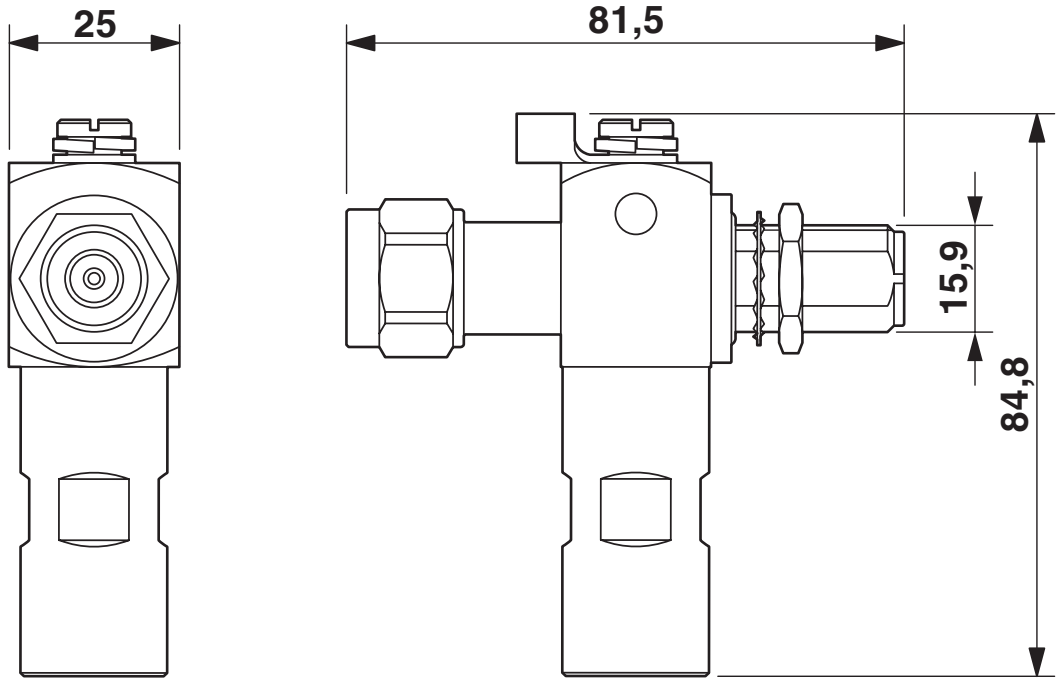
| | |
|---|---|
| Standards/regulations | IEC 60664-1 |
| Standards/specifications | IEC 61643-21/A1 |
| Note | 2008 |
| Standards/specifications | EN 61643-21/A1 |
| Note | 2009 |

## Mounting

| | |
|---|---|
| Mounting type | Connection-specific intermediate plugging |

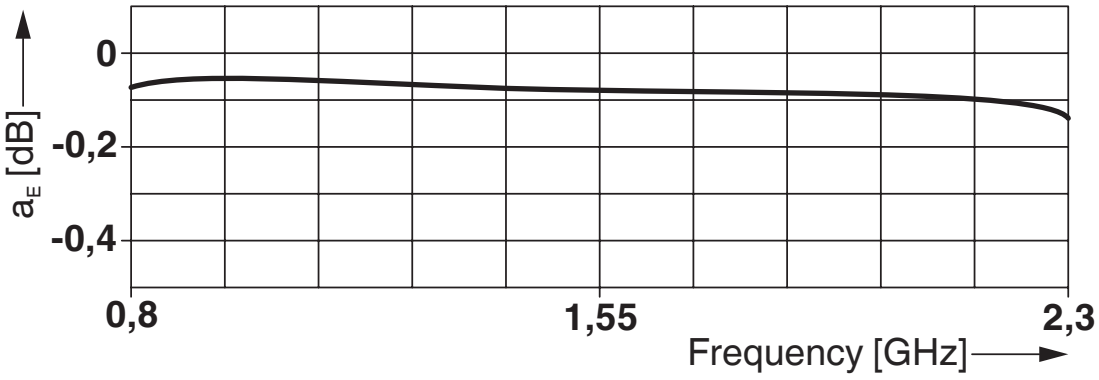
## Drawings

Dimensional drawing

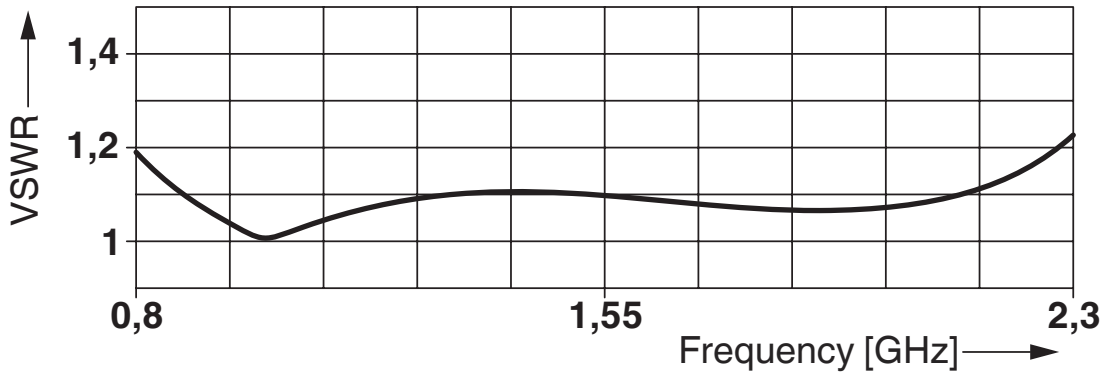



Dimensional drawing
CN-LAMBDA/4-2.25-SB

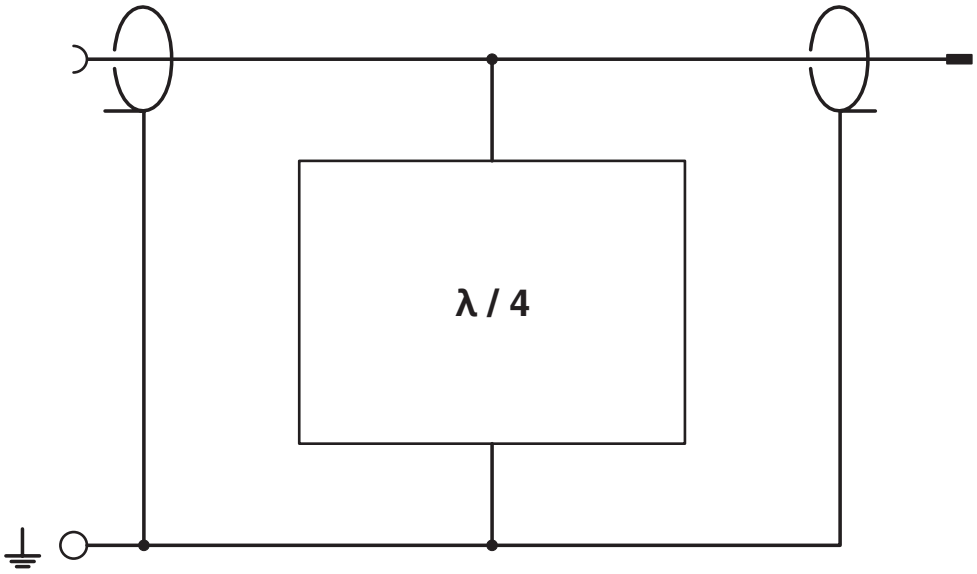
Diagram



Diagram




Circuit diagram




Circuit diagram

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-13.0 | 27171504 |
| ECLASS-15.0 | 27171504 |

### ETIM

| | |
|---|---|
| ETIM 10.0 | EC001466 |

### UNSPSC

| | |
|---|---|
| UNSPSC 21.0 | 39121600 |

## Environmental product compliance

EU RoHS

| | |
|---|---|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 6(c) |

China RoHS

| | |
|---|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|---|---|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| SCIP | e9651d28-e0ba-4650-b1fa-961e034d92d6 |

EF3.1 Climate Change

| | |
|---|---|
| CO2e kg | 8.763 kg CO2e |


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