

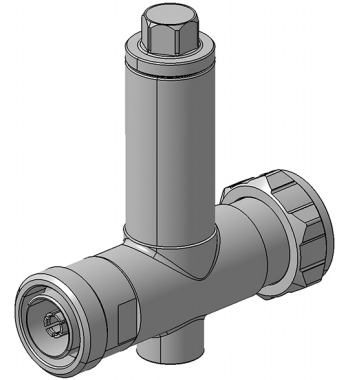
## EMP Protector 3409.41.0044-EX

### Description

High-power/low-IM GDT hybrid technology

#### Benefits

Self-extinguishing Semper functionality  
AISG compliant for 2.176 MHz carrier  
Broad-band design  
DC continuity for remote powering  
The protector can also be installed reversely  
Replaceable GDT unit 9071.99.0748, (90V) included  
Compliant to IEC 61643-21



### Product Configuration

Main path connectors Port 1: unprotected, 7/16 plug (male) - Port 2: protected, 7/16 jack (female)  
Mounting and grounding M8 (screw), brk (bracket)

### Technical Data

#### Electrical Data

|                 |             |                |                |                 |
|-----------------|-------------|----------------|----------------|-----------------|
| Impedance       | 50 $\Omega$ |                |                |                 |
| Frequency range | 2.176 MHz   | 806 - 2500 MHz | 806 - 960 MHz  | 1710 - 2500 MHz |
| Return loss     | 20 dB typ.  | $\geq 20.8$ dB | $\geq 26$ dB   | $\geq 26$ dB    |
| Insertion loss  | 0.1 dB typ. | $\leq 0.15$ dB | $\leq 0.15$ dB | $\leq 0.15$ dB  |
| RF CW power     |             | $\leq 1500$ W  | $\leq 3000$ W  | $\leq 1500$ W   |
| PIM 3rd order   |             | -150 dBc typ.  | -150 dBc typ.  | -150 dBc typ.   |

|                                   |                                                                                                                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|
| DC supply voltage                 | $\leq 48$ V                                                                                                       |
| DC current                        | $\leq 2.5$ A                                                                                                      |
| Surge current handling capability | 30 single / 20 multiple kA (test pulse 8/20 $\mu$ s)                                                              |
| Residual pulse energy             | 350 $\mu$ J typically (test pulse 4 kV 1.2/50 $\mu$ s / 2 kA 8/20 $\mu$ s) main path - protected side             |
| Turn-off time                     | 20 s typically at 2.0 A and 25 °C ambient temperature<br>< 40 s typically below 1 A and 25 °C ambient temperature |
| Recovery time                     | 7 s at 25 °C ambient temperature                                                                                  |

#### Mechanical Data

|                   |       |
|-------------------|-------|
| Number of matings | 500   |
| Weight            | 407 g |

#### Environmental Data

|                                                      |                                                                                                   |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Operating temperature                                | -40 °C to +85 °C (Lightning protection functionality)<br>-20 °C to +85 °C (SEMPER™ functionality) |
| Waterproof degree                                    | IP66 (according to IEC 60529, data refer to the coupled state)                                    |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant acc. Annex III                                                                          |

#### Material Data

| Piece Parts           | Material               | Surface Plating       |
|-----------------------|------------------------|-----------------------|
| Housing               | Brass                  | SUCOPLATE (R) Plating |
| Port 1 center contact | Brass                  | Silver Plating        |
| Port 2 center contact | Copper Beryllium Alloy | Silver Plating        |

### Related Documents

|                      |                |
|----------------------|----------------|
| Outline drawing      | DOU-00004576.1 |
| Mounting instruction | DOC-0000176104 |

### Remarks

## EMP Protector 3409.41.0044-EX