

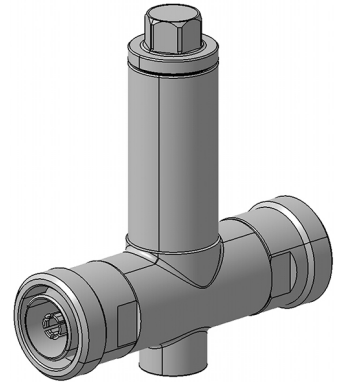
## EMP Protector 3409.41.0051-EX

### 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 jack (female) - 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 < 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	412 g

#### Environmental Data

Operating temperature	-40 °C to +85 °C (Lightning protection functionality) -20 °C to +85 °C (SEMPER <sup>TM</sup> functionality)
Waterproof degree	IP65 (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	Copper Beryllium Alloy	Silver Plating
Port 2 center contact	Copper Beryllium Alloy	Silver Plating

### Related Documents

Outline drawing	DOU-00004588.1
Mounting instruction	DOC-0000176104