

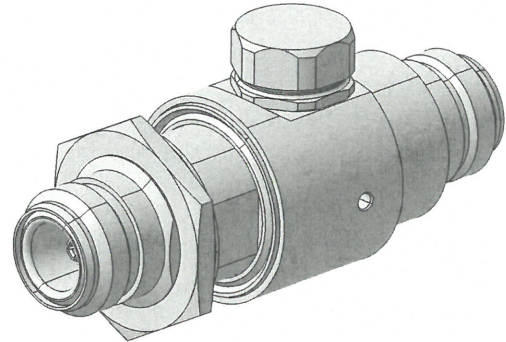
EMP Protector 3402.17.E

Description

GDT technology up to 2.5 GHz

Benefits

Broad-band design
 DC continuity for remote powering
 The protector can also be installed reversely
 Replaceable GDT 9071.99.0547 (230 V) included
 Compliant to IEC 61643-21



Product Configuration

Main path connectors
 Mounting and grounding

Port 1: unprotected, N jack (female) - Port 2: protected, N jack (female)
 MH25 (bulkhead mounting), brk (bracket)

Technical Data

Electrical Data

Impedance	50 Ω
Frequency range	0 - 2500 MHz
Return loss	≥ 20 dB
Insertion loss	≤ 0.2 dB
RF CW power	≤ 160 W
PIM 3rd order	not specified

Surge current handling capability	30 single / 20 multiple kA (test pulse 8/20 μs)
Residual pulse energy	350 μJ typically (test pulse 4 kV 1.2/50 μs / 2 kA 8/20 μs) main path - protected side

Mechanical Data

Number of matings	500
Weight	126 g

Environmental Data

Operating temperature	-40 °C to +85 °C
Waterproof degree	IP66 (according to IEC 60529, data refer to the coupled state)
2011/65/EC (RoHS)	compliant

Material Data

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

Related Documents

Outline drawing	DOU-00004079.1
Mounting instruction	DOC-0000176104

Remarks

Customer part number No.: A0665575 /

Nato stock number 5920-12-379-0443

Series 3402 lightning EMP protectors

Gas discharge tube (GDT) technology up to 2.5 GHz

Description

HUBER+SUHNER gas discharge tube protectors make the best of the traditional spark gap protection principle for general applications in electronics and adapt it perfectly to RF coaxial line applications.

At their heart are specially designed gas discharge tubes. The available product range of GDT's enables a selection according to the RF transmission power with an optimum protection performance.

A very important feature of the GDT protectors is the possibility to DC/AC power outdoor equipment via coaxial cable.

Series 3402 products can be used broadband from DC to 2 GHz or even higher.

They are generally designed as coaxial feed-throughs which allow the customer to build up a protected area according to the recommended and well-proven protection zone principle of IEC 62305.

HUBER+SUHNER GDT protectors are designed such that the gas discharge tubes can be easily exchanged for new operation conditions or replaced in the case of a necessary service.

Features

- Broadband DC to 2.5 GHz
- DC transmission
- Gas discharge tube replaceable
- Easy maintenance
- SEMPER™ self-extinguishing functionality optional (see page 113)

Specifications

Electrical data	Requirements
RF:	
Impedance	50 or 75 Ω
Frequency range	DC - 2.5 GHz (some types different according to shown specification, but 2 GHz min.)
RL*	20 dB min. (exception F connectors)
IL*	0.2 dB max. (exception F connectors)
RF power transmission	according to selected gas discharge tube - refer to page 134
Protection:	
Surge current handling capability	30 kA once and 20 kA multiple (8/20 μs test pulse) 8 kA (10/350 μs test pulse)
Residual pulse voltage and energy	for typical values refer to the following diagram

* With 230 V gas discharge tube (9071.99.0547)