

Series 3405

Multiband Gas Capsule Lightning Protectors

Description

SUHNER multiband gas capsule protectors provide lightning protection for different frequency bands with DC on the line simultaneously. The present product range comprises products for two customer-specific frequency ranges each. There can be covered frequencies in the range of 800 MHz to the frequency limit of the selected coaxial interface.

The protection performance is equal to standard gas capsule protectors. Gas capsules have to be selected according to the RF transmission power to achieve an optimum protection performance. The gas capsules can be easily exchanged for new operation conditions or replaced in the case of a necessary service.

Features

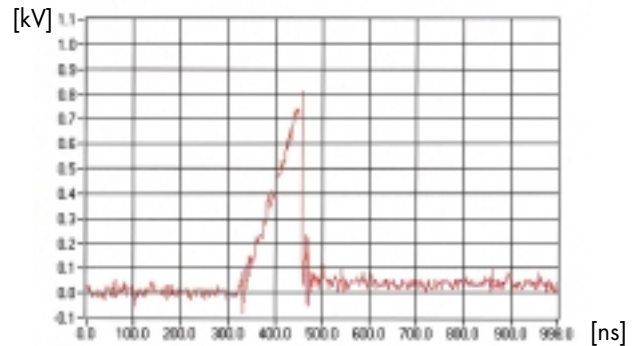
- Availability for applications from 800 MHz to 18 GHz (N interface)
- Narrowband (normally 2 to 20% of each centre frequency)
- DC transmission
- Current-handling capability 40/20 kA
- Easy maintenance

Specifications

Electrical data	Requirements
RF:	
Impedance	50 Ω
Frequency range	two ranges according to product specification
RL	20 dB min.
IL	0.2 dB max.
PIM	according to product detail specification
RF power transmission	according to selected gas capsule
Protection:	
Surge current handling capability	40 kA once and 20 kA multiple (8/20 μ s test pulse)
Residual pulse voltage and energy	for typical values refer to the following diagram

Typical residual pulse for series 3405
(test pulse 4 kV/2 kA, 8/20 μ s):

Residual pulse voltage: 820 V
Residual pulse energy: 550 μ J



Mechanical data	Requirements
Coupling nut torque force	according to IEC/MIL
Durability (matings)	500 min.
Bulkhead mounting torque force:	
Mounting hole diameter	
19 mm/ 3/4" max.	20 Nm/14.7 ft-lb
larger than 19 mm	35 Nm/25.8 ft-lb

Environmental data	Requirements/Test conditions
Operation temperature range	- 40 °C...+ 85 °C/ - 40 °F...+ 185 °F
Waterproof degree (IEC 529)	refer to product specification, data refer to the coupled state
Temperature shock	MIL-STD-202, Meth. 107 F, Cond. B, - 65 °C/+ 125 °C
Moisture resistance	MIL-STD-202, Meth. 106 D, 10 cycles
Vibration	MIL-STD-202, Meth. 204, Cond. D, 10–2000 Hz

Material data			
Component part	Standard	Material	Plating
Housings	QQ-B-626	brass	SUCOPLATE®
Male contacts	QQ-B-626	brass	gold or silver plating
Female contacts	QQ-C-530	CuBe2	gold or silver plating
Insulators	ASTM-D-1457	PTFE	
Gaskets	ASTM-E-1418 PS 1	silicone rubber	