

Series 3407

Quarter-Wave Lightning Protectors with Integrated High-Pass Filter

Description

SUHNER quarter-wave lightning protectors with integrated high-pass filter feature an added useful RF component to the proven premium standard

quarter-wave protector design. Thus, they can offer an essentially improved protection performance.

Features

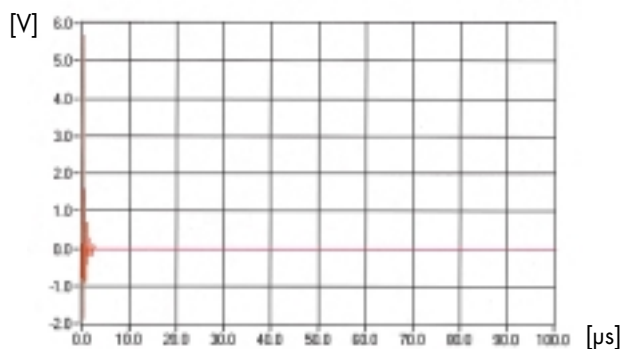
- Residual voltage reduced by 80% compared to standard types of series 3400
- Residual energy reduced up to factor 600 (more than 99%)
- DC-blocking at the protected side of the component

Specification

Electrical data	Requirements
RF:	
Impedance	50 Ω
Frequency range	according to product specification, basic range 80 MHz to frequency limit of coaxial interface
RL	20 dB min.
IL	0.2 dB max.
PIM	according to product detail specification
RF power transmission	refer to data in Selection Terms « RF Power and DC Ratings» and product detail specification
Protection:	
Surge-current-handling capability	N: 50 kA, DIN 7/16: 100 kA (8/20 μ s test pulse)
Residual pulse voltage and energy	for typical values refer to the following diagram

Typical residual pulse for series 3407
(test pulse 4 kV/2 kA, 8/20 μ s):

Residual pulse voltage: 5.7 V
Residual pulse energy: 0.03 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)	IP 65 min., 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	