

## Universal Gas Tube Coaxial Surge Protectors



### Overview

The PSP8X09-F/FF series coaxial surge protectors have been designed to protect antennas, microwaves, broadband applications, two-way radios, cellular, GPS and CATV equipment against lightning surges and electrical transients. They are a first line of defense for your sensitive equipment.

The PSP8X09-F/FF series employs a patented gas tube, are waterproof (IP67) and available with M6 ground screw.

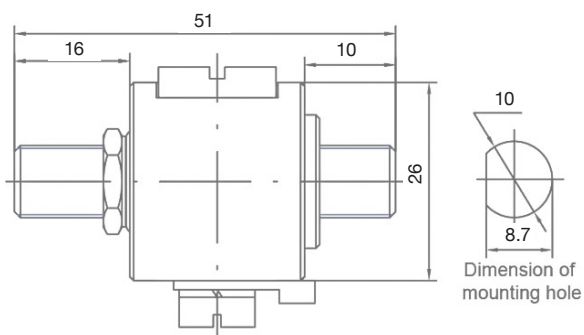
### Features

- UL 497E
- I<sub>max</sub>: 20 kA per phase
- Gas-tube technology
- NEMA 6 (IP67) indoor/outdoor rated enclosure
- I<sub>n</sub>: 20 kA
- 20 kA transient protection (8x20 μs)
- 5 kA transient protection (10x350 μs)
- DC pass to true
- VSWR < 1.25:1
- Insertion Loss < 0.2 dB

### Applications

- Tower mounted amplifiers (TMA)
- Global positioning systems (GPS)
- Antenna systems
- Tower top electronics (TTE)
- Transmitters and receivers
- WiFi
- Broadband wireless
- WiMax broadband wireless
- Bi-directional, series installed
- Waterproof

### Dimensions in mm (millimeters)



## Specifications

Installation		
Operating Temperature (Min)	°C	-40
Operating Temperature (Max)	°C	85
Operating Temperature (Min)	°F	-40
Operating Temperature (Max)	°F	185
Operating Relative Humidity (Max)	%	100
Operating Altitude (Max)	m	2000
Operating Altitude (Max)	ft	6500
Housing/Enclosure material		Cu, Zn, Sn Plated Brass
Mounting		Bracket or Feedthrough
IP Environmental rating (IP)		IP67
NEMA Environmental rating (NEMA)		NEMA 6
Installation Location		Indoor / Outdoor
Spare part	GDT	BB HF 250/20
Product Dimension (L)	mm	51
Product Dimension (H)	mm	26
Product Dimension (W)	mm	8.70
Product Dimension (L)	inch	2.01
Product Dimension (H)	inch	1.02
Product Dimension (W)	inch	0.34
Electrical Characteristics		
Frequency Range	GHz	0-4
Insertion Loss	dB	< 0.2
Return Loss	dB	> 22
Impedance	Ω	75
VSWR		< 1.25:1
Max. Load Current (IL)	A	10
Max. Discharge Current (Imax)(8 x 20 μs)	kA	20
Protection Mode(s)		Common Mode
Impulse Current (Iimp)(10 x 350 μs - D1 Test)	kA	1
Nominal Discharge Current (In)(8 x 20 μs - C2 Test)	kA	5
Max Power	W	190
DC Pass		True
Insulation Resistance	GΩ	≥ 10
RF Power (Maximum)	W	190
Return Loss (Minimum)	dB	> 20
MCOV	V	48
AC/DC/DC PV/RF		RF

Mechanical Characteristics		
Technology		Gas Discharge Tube
Connectors		"F" Female/Female
Connection Method		Series Connector, Bi-Directional
Mounting		Feedthrough
Housing Material		Brass/Surface Plating : Cu Zn Sn
Environmental Rating		NEMA 6P (IP67)
Outdoor application		Yes
Dimensions		See Diagram
Contact Material		Bronze/Surface Au-Ag
Insulation material		PTFE
Weight		< 0.01 kg / 0.30 lbs
Standards		
Standards Compliance		IEC 61643-21 / EN 61643-21 / UL497C / UL497E
RoHS Compliance		Yes
UL Standard		UL497E
UL Category		QVLA
UL File Number		E351342
Standards		NOM-003-SCFI-2014, NOM-001-SCFI-1993