

## **Features**

- Heavy duty design
- High frequency DC-4 GHz
- DC Pass to ±48 V
- VSWR <1.2
- Low insertion loss <0.1 dB
- Bidirectional
- Water resistant

- Replaceable gas tube
- Three grounding options
- RoHS compliant\*
- (JL) Listed (File: E360007)

# 1977 Series High Frequency Coaxial SPD

### **General Information**

The Bourns® Model 1977 Series Coaxial Surge Protective Device (SPD) has been designed to provide heavy duty protection for antennas, broadband, microwave, GPS, cellular and CATV applications against surges caused by lightning and other electrical transients.

### **Electrical Characteristics**

Characteristic	Model No.		
	1977-09-xxx	1977-25-xxx	1977-50-xxx
Frequency Range		DC-4 GHz	
DC Turn-On (Breakdown)	90-130 V	200-300 V	400-600 V
Technology	Gas Discharge Tube		
Insertion Loss	≤0.2 db		
Return Loss	≥20 db		
VSWR	<1.2:1		
lpeak (8/20 μs)		20 kA	
Maximum Power	25 W	190 W	780 W
Maximum Current	10 A		
Impedance	50 ohms <sup>1</sup>		

<sup>&</sup>lt;sup>1</sup> Impedance for F-Type Connector is 75 ohms.

## **General Characteristics**

Characteristic		Model No.		
	1977-09-xxx	1977-25-xxx	1977-50-xxx	
Connection Method		Series (Bidirectional)		
Connectors		N, F		
Grounding		M6 Screw, Bulkhead, Bracket		
Weight		4.4 oz.		

## **Environmental Characteristics**

Characteristic	Model No.		
	1977-09-xxx	1977-25-xxx	1977-50-xxx
Environmental Rating	IP 65		
Operating Temperature	-50 °C to +85 °C		
Operating Altitude	13,000 ft. (4,000 m)		
Relative Humidity	Up to 5-95 %		
	Non-condensing: Up to 100 %		

## **BOURNS®**

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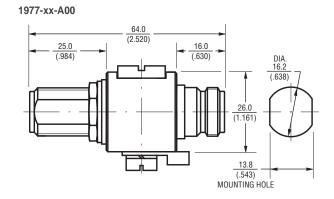
<sup>\*</sup>RoHS Directive 2015/863, Mar 31, 2015 and Annex.

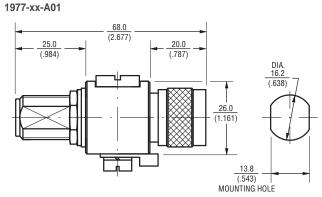
## **Applications**

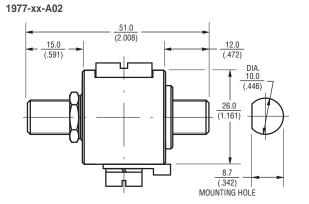
- Multi-point radio and backhaul bridges
- Tower Mounted Amplifiers (TMA)
- Antenna systems
- Tower Top Electronics (TTE)
- Transmitters and recievers
- Wimax broadband wireless

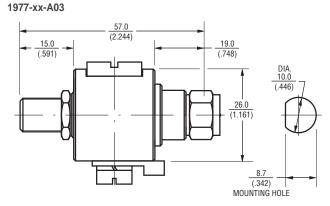
# 1977 Series High Frequency Coaxial SPD

## **Product Dimensions**









DIMENSIONS:

MM (INCHES)

## **How To Order**

1977 - xx - xxx Series -DC Turn-On 09 = 90-130 V 25 = 200-300 V 50 = 400-600 V Connector Type

A00 = N-type Female/Female A01 = N-type Male/Female A02 = F-type Female/Female A03 = F-type Male/Female

Examples:	
1977-09-A00	Coax, DC to 4 GHz, N, FF, 25 W
1977-09-A01	Coax, DC to 4 GHz, N, MF, 25 W
1977-09-A02	Coax, DC to 4 GHz, F, FF, 25 W
1977-09-A03	
1977-25-A00	Coax, DC to 4 GHz, N, FF, 190 W
1977-25-A01	Coax, DC to 4 GHz, N, MF, 190 W
1977-25-A02	Coax, DC to 4 GHz, F, FF, 190 W
1977-25-A03	Coax, DC to 4 GHz, F, MF, 190 W
1977-50-A00	Coax, DC to 4 GHz, N, FF, 780 W
1977-50-A01	Coax, DC to 4 GHz, N, MF, 780 W
1977-50-A02	Coax, DC to 4 GHz, F, FF, 780 W
1977-50-A03	