



Type N F/F In/Out Bulkhead Coax RF Surge Protector,  
DC - 7GHz and 3GHz - 4GHz, DC Pass, 90W,  
IP67, 20kA, Gas Discharge Tube, BiDirect

## RF Surge Protectors Technical Data Sheet

PE73SP1038

### Features

- Surge current of 20kA
- Max Power 90W(RMS)
- Frequency range from DC to 7GHz
- N-type female connectors
- Waterproof IP67 rated
- DC Pass
- VSWR 1.6 max
- CE & RoHS compliant
- Bi-Directional

### Applications

- WiFi
- GPS
- Land mobile radio

### Description

RF surge protector (also known as lightning arrester) PE73SP1038 from Pasternack utilizing a proprietary gas tube surge protection technology protects critical hardware from lightening events while maintaining the RF performance. This RF surge protector component is manufactured in a coaxial in-line design with wide operating frequency range. All Pasternack RF surge protector products are available in stock with same day shipping.

### Electrical Specifications

Surge Protector Type  
DC Handling

Gas Discharge Tube  
DC Pass

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		7	GHz
Impedance		50		Ohms
VSWR			1.6:1	
Return Loss			13	dB
Insertion Loss			0.6	dB
Input Power, CW			90	Watts
90W @ 30MHz				
9W @ 3GHz				
Surge Current			20	kA
IEC 61000-4-5 8/20 $\mu$ s WAVEFORM				
Turn On Voltage		300		Volts
Sparkover Impulse Voltage		500		Volts
500 Volts @ 1000V/ $\mu$ s				
Sparkover Voltage (DC)		300 $\pm$ 20%		Volts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Type N F/F In/Out Bulkhead Coax RF Surge Protector, DC - 7GHz and 3GHz - 4GHz, DC Pass, 90W, IP67, 20kA, Gas Discharge Tube, BiDirect PE73SP1038](#)



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Holdover Voltage	80	Volts
80 Volts @ <150ms		

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 4	4 to 6.5	6.5 to 7		GHz
VSWR, Max	1.1:1	1.2:1	1.4:1	1.6:1		
Insertion Loss, Max	0.1	0.25	0.35	0.6		dB

### Mechanical Specifications

#### Configuration

Input Connector	N Female
Output Connector	N Female

### Environmental Specifications

#### Temperature

Operating Range	-55 to +85 deg C
Ingress Protection (IP) Rating	IP 67

### Compliance Certifications (see [product page](#) for current document)

### Plotted and Other Data

Notes:

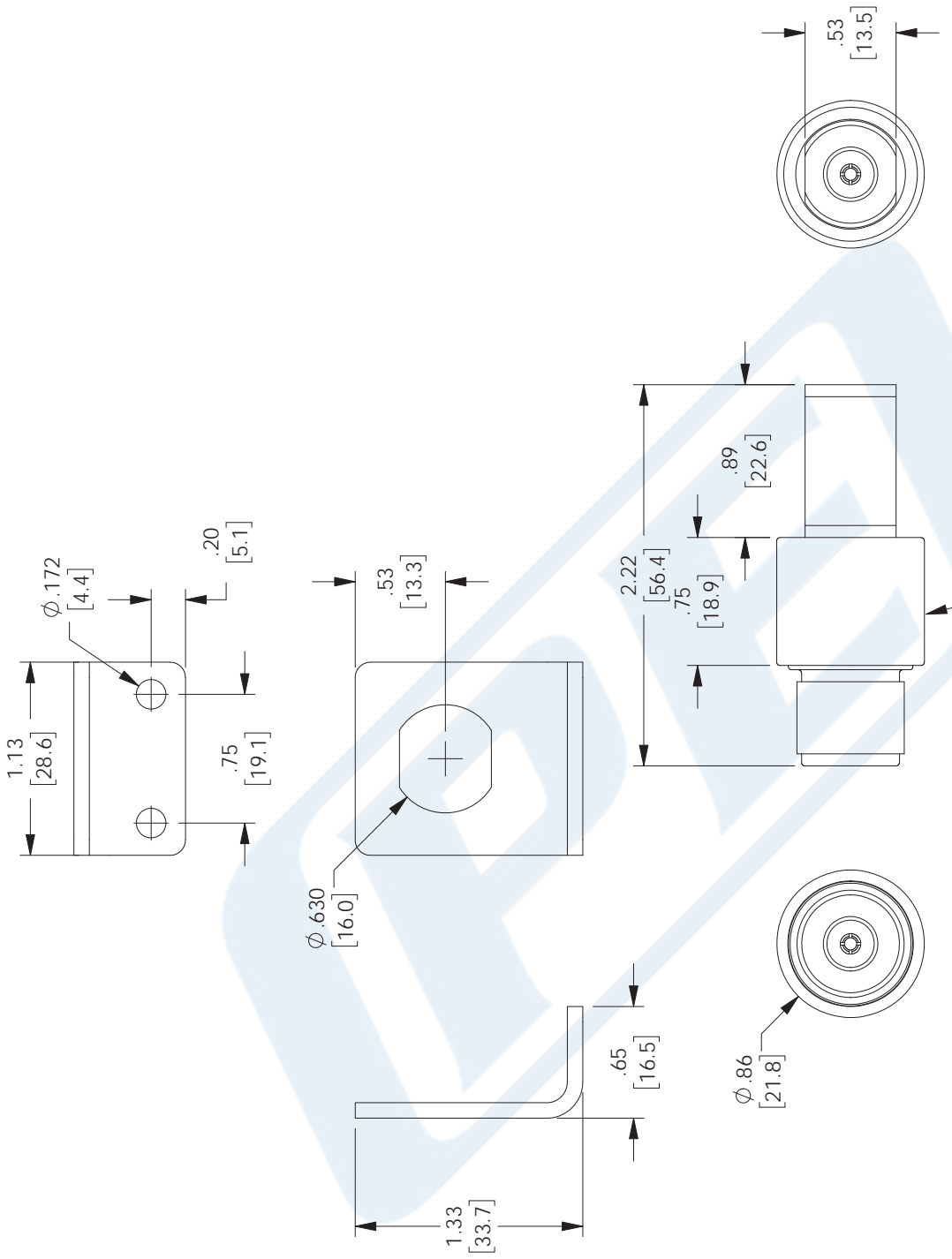
Type N F/F In/Out Bulkhead Coax RF Surge Protector, DC - 7GHz and 3GHz - 4GHz, DC Pass, 90W, IP67, 20kA, Gas Discharge Tube, BiDirect from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/type-n-surge-protector-7ghz-4ghz-gas-discharge-tube-pe73sp1038-p.aspx>

# PE73SP1038 CAD Drawing

Type N F/F In/Out Bulkhead Coax RF Surge Protector, DC - 7GHz and 3GHz  
 - 4GHz, DC Pass, 90W, IP67, 20kA, Gas Discharge Tube, BiDirect



**STANDARD TOLERANCES**  
 .X ±0.2  
 .XX ±0.01  
 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

**NOTES:**  
 BRACKET AND HARDWARE INCLUDED.  
**REGULATORY COMPLIANCE:**  
 CE2011/65/EU (RoHS DIRECTIVE)

**PE PASTERNAK**  
 THE ENGINEER'S RF SOURCE  
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DWG TITLE  
 PE73SP1038

**NOTES:**  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES (mm).

<b>CAGE CODE</b> 53919	<b>CAD FILE</b> 3/23/18	<b>SCALE</b> N/A	<b>SIZE</b> A	256
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