

## In-line SPD for Coaxial & RF Systems

# SPT CP BNC

C1 • C2 • C3

IEC/EN Category: C1/C2/C3  
 Protection: Impedance Matched  
 Maximum Operating:  
     Voltage: 70, 180, 280 V  
 Maximum Peak Power: 40, 125, 300 W  
 Frequency Range: DC – 2.6 GHz  
 Surge Discharge Ratings: I<sub>n</sub> : 10 kA, I<sub>max</sub> : 20 kA  
     Impedance: 50 Ω  
     Insertion Loss: < 0.4 dB  
     Return Loss: > 20 dB  
     Termination: BNC Type (F-F, M-F)  
     Housing: In-line Installation, Shielded Enclosure  
 Compliance: IEC/EN 61643-21



The SPT CP BNC Series of coaxial surge protectors is intended to protect RF antenna systems and is suitable for frequencies from DC to 2.6 GHz.

It is designed as an in-line unit allowing ease of installation. The careful design, low capacitance gas discharge arresters and high quality BNC-type termination connectors, ensures a minimum of insertion loss throughout the frequency band. Transfer power is 40 W to 300 W continuous, depending on the coaxial cable protector voltage.

The CP coaxial cable protector is designed in accordance with IEC61643-21: 2012 standards and regulations.

A grounding stud is provided which should be connected to the system ground or coaxial feed-through bulkhead, as directly as possible.

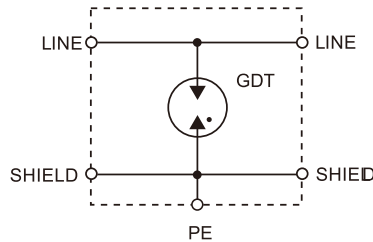
## Technical Data

SPT CP BNC		70	180	280
<b>IEC Electrical</b>				
Maximum Continuous Operating Voltage	U <sub>c</sub>	70V	180V	280V
Maximum Peak Power	P <sub>max</sub>	40W	125 W	300W
C2 Nominal Discharge Current (8/20 μs)	I <sub>n</sub>		10 kA	
Maximum Discharge Current (8/20 μs)	I <sub>max</sub>		20 kA	
Residual Voltage at (1 kV/μs)	U <sub>res</sub>	<600V	< 700V	<900V
Impedance	Z		500	
Insertion Loss	IL		<0. 4dB ,	
Return Loss	RL		>20dB	
Insulation Resistance of Protection	R <sub>iso</sub>		>10GQ	
Frequency Range	f <sub>G</sub>		0-2.6 GHz	
<b>Mechanical</b>				
Temperature Range		-40 °F to +176 °F [-40 °C to +80 °C]		
Connection		BNC Female/Female		BNC Male/Female
Degree of Protection IEC/EN 60529		IP 20 (built-in)		
Housing Material		Metal		
<b>Order Information</b>				
Order Code		70	180	280
SPT CP BNC-FF-xxx		800 850	800 851	800 852
SPT CP BNC-MF-xxx		800 853	800 854	800 855

## Internal Configuration

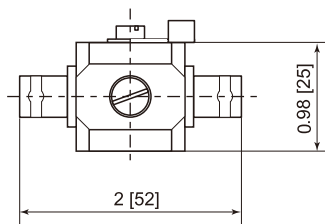
### Legend

GDT Gas Discharge Tube  
PE Ground

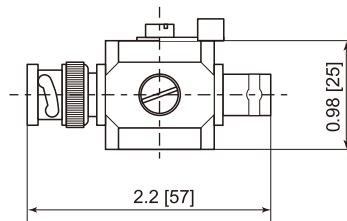


## Dimensions & Packaging

SPT CP BNC-FF



SPT CP BNC-MF



SPT CP BNC	SPT CP BNC-FF-xxx			SPT CP BNC-MF-xxx		
	70	180	280	70	180	280
<b>Dimensions &amp; Packaging</b>						
Weight per Unit	3.74 oz [106g]			4.02 oz [114 g]		
Packaging Dimensions (Single Unit)	2.9 × 1.2 × 1.2" [73 × 30 × 30 mm]					
Minimum Package Quantity	100 pieces					