

**DATA SHEET**

In-line SPD for Coaxial &amp; RF Systems

**RayDat CP BNC Series****C1 • C2 • C3**

IEC/EN Category: C1/C2/C3  
 Surge Discharge Ratings:  $I_n$ : 10 kA,  $I_{max}$ : 20 kA  
 Max. Operating Voltage: 70, 180, 280 V  
 Maximum Peak Power: 40, 125, 300 W  
 Frequency Range: DC–2.6 GHz  
 Impedance: 50  $\Omega$   
 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

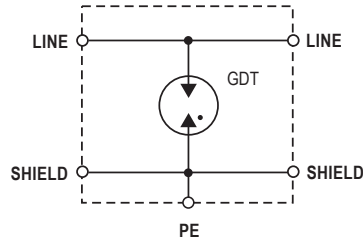
**Technical Data**

CP BNC		70	180	280
<b>Electrical</b>				
Maximum Continuous Operating Voltage	$U_c$	70 V	180 V	280 V
Maximum Peak Power	$P_{max}$	40 W	125 W	300 W
C2 Nominal Discharge Current (8/20 $\mu$ s)	$I_n$		10 kA	
Maximum Discharge Current (8/20 $\mu$ s)	$I_{max}$		20 kA	
Residual Voltage at (1 kV/ $\mu$ s)	$U_{res}$	< 600 V	< 700 V	< 900 V
Impedance	$Z$		50 $\Omega$	
Insertion Loss	$I_L$		< 0.4 dB	
Return Loss	$R_L$		> 20 dB	
Insulation Resistance of Protection	$R_{iso}$		> 10 G $\Omega$	
Frequency Range	$f_G$		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
CP BNC-FF-xxx		800 850	800 851	800 852
CP BNC-MF-xxx		800 853	800 854	800 855

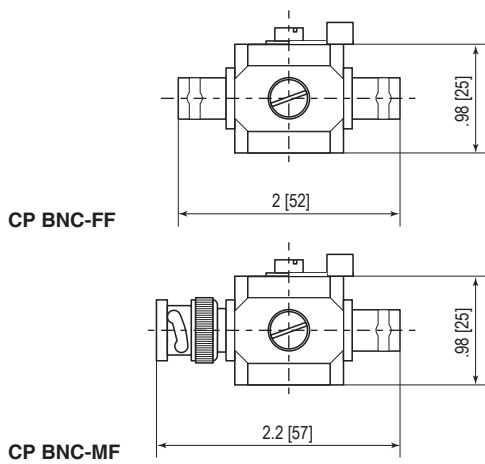
## RayDat CP BNC Series

### Internal Configuration

**Legend**  
 GDT Gas Discharge Tube  
 PE Ground



### Dimensions & Packaging



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

inches  
[mm]

Information contained in this document is subject to change at any time without notice.

**RoHS**  
COMPLIANT  **CE**

**Raycap**

www.raycap.com

© 2020 Raycap All rights reserved.  
G29-00-050 201120