

**DATA SHEET**

## Coaxial SPD for Analog Video Surveillance Systems

**RayCox BNC Series****C1 • C2 • C3**

IEC/EN Category: C1/C2/C3  
 Surge Discharge Ratings:  $I_n$ : 10kA,  $I_{max}$ : 20kA  
 Voltages: 10, 24VDC  
 Max. Operating Voltage: 12, 24VDC  
 Frequency Range: 100MHz  
 Series Load Current: 100mA  
 Enclosure: In-line Installation  
 Termination: BNC Connectors  
 Housing: Shielded Enclosure  
 Compliance: IEC/EN 61643-21

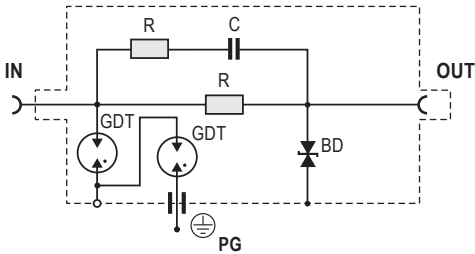
**Technical Data**

BNC		BNC 5		BNC 12	
Electrical					
Nominal Operating Voltage (DC)		U <sub>n</sub>	10V	24V	
Maximum Continuous Operating Voltage (DC)		U <sub>c</sub>	12V	28V	
Rated Operating Current at 25°C		I <sub>L</sub>		100mA	
C2 Nominal Discharge Current (8/20µs)		I <sub>n</sub>		10kA	
Maximum Discharge Current (8/20µs)		I <sub>max</sub>		20kA	
Residual Voltage at 5 kA (8/20µs)	(Wire-Shield)	U <sub>res</sub>	<35V	<65V	
Rated Spark Overvoltage	(Wire-Shield)		13.5V–16.5V	30V–36V	
	(Shield-Ground)		72V–108V	72V–108V	
Response Time Overvoltage Protection	(Wire-Shield)	t <sub>A</sub>		<10ns	
	(Shield-Ground)			<100ns	
Insulation Resistance of Protection	(Wire-Shield)	R <sub>iso</sub>	≥12MΩ	≥28MΩ	
	(Shield-Ground)			≥1GΩ	
Serial Resistance per Path		R		9–11Ω	
Transverse Capacitance	(Wire-Shield)	C		30pF	
	(Shield-Ground)			1pF	
Cut-off Frequency		f <sub>G</sub>		100MHz	
Transmission Rate				16Mbit/s	
Mechanical					
Temperature Range			-40 °F to +176 °F [-40 °C to +80 °C]		
Connection			BNC Connector		
Degree of Protection IEC/EN 60529			IP 20 (built-in)		
Housing Material			Metal		
Order Information					
Order Code		BNC 5		BNC 12	
BNC xx		7050.22		7050.13	

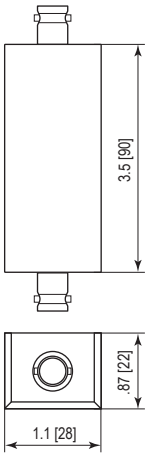
RayCox BNC Series

Internal Configuration

- Legend**
- BD Bi-directional TVS Diode
  - C Capacitor
  - GDT Gas Discharge Tube
  - PG Protective Grounding
  - R Resistor



Dimensions & Packaging



BNC	BNC 5	BNC 12
<b>Dimensions</b>		
Weight per Unit		2.04 oz [58 g]
Packaging Dimensions (Single Unit)		5.5 × 7.9" [140 × 200 mm]

inches  
[mm]

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

