

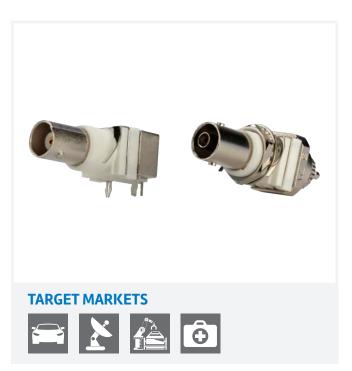
# Amphenol ICC

# Filter RF Connectors – BNC Series

### FILTERED RF CONNECTOR PROTECTING THE SYSTEM FROM EMI/ESD

Amphenol's BNC RF connectors provide optimum capacitive decoupling between the connector body and the mounting panel, by harmlessly dissipating EMI (Electromagnetic Interference) on the coaxial shield to the chassis ground through capacitors, while not affecting the DC and power supply frequencies. These connectors eliminate the need for additional filter elements on PCB and saves on PCB real estate and cost, while providing better EMI control.

- Inter-mateable and inter-changeable with standard nonfiltered versions
- RF performance parameters identical to non-filtered counterpart
- Additional capacitance values are available for different performance levels
- High working voltage of up to 200VDC



#### **FEATURES**

- Integrated stress isolated chip capacitors between coaxial shield and mounting panel shunts EMI on the shield to the chassis ground
- 10000 pF capacitors provides filter insertion loss up to 30dB at 1000 MHz
- Available in Filtered, panel-insulated, and grounded version with integrated spark gap arrestors, and a  $1M\Omega$  resistor
- Wide operating temperature range from -20°C to +85°C
- Standard BNC mating interface and mounting
- 50 and 75 $\Omega$  impedance
- Vertical, right angle
- PCB tail, press-fit, solder cup
- Cable, Jack-to-Jack adaptors
- RoHS compliant

#### **BENEFITS**

- Eliminates noise on coaxial shield to protect system and provides DC isolation to reduce ground loop problems
- Prevents coaxial noise over a wide frequency range
- Wide range of electrical options for a variety of applications
- Suitable for demanding applications and harsh environments
- Direct replacement of standard unfiltered BNC Connectors
- Range of styles for all applications

Meets environmental, health and safety requirements

### www.amphenol-icc.com

### **TECHNICAL INFORMATION**

#### MATERIAL

- Shell: Zinc Die Cast or Brass; Nickel plated
- Contacts: Phosphor bronze or berylium copper; gold plated (456-107S is silver plated)
- Contact Insulator: Nylon or teflon
- Insulator Body: Thermoplastic

#### **ELECTRICAL PERFORMANCE**

- Capacitance: 10000pF
- Working Voltage: 200V DC
- Dielectric Withstanding Voltge: 600V DC, 500VRMS
- Filter Insertion Loss dB: 4 @ 1MHz 30 @ 1000MHz (EMI frequency)
- $\bullet$  Impedance: 50  $\Omega$  and 75  $\Omega$

#### PACKAGING

Box

#### **SPECIFICATION**

Amphenol Product Specification: MIL-STD-1344

### **PART NUMBERS**

Description	Туре	Part Numbers
BNC Filtered RF Connector	10000 pf, 50 $\Omega$	456E-117
BNC Filtered RF Connector	10000 pf, 75 $\Omega$	456E-717
BNC Filtered RF Connector	10000 pf, 50 $\Omega$ , Grounded	456E-117G
BNC Filtered RF Connector	10000 pf, 75 $\Omega$ , Grounded	456E-717G

#### **APPROVALS AND CERTIFICATIONS**

- RoHS
- UL E135615
- CSA LR68598

#### **MECHANICAL PERFORMANCE**

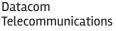
Operating Temperature: -20°C to +85°C

#### **TARGET MARKETS/APPLICATIONS**



Automotive







#### Energy Industrial



Medical

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Amphenol:

<u>456E717S</u> <u>456E117H</u> <u>456E717</u> <u>456E107S</u> <u>456E717G</u>