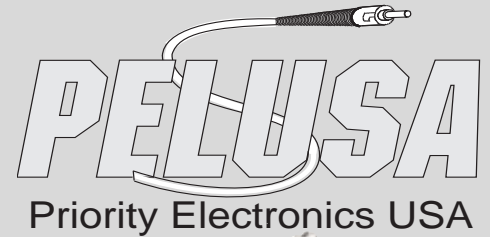




DS3 Mini BNC Bundle Assemblies



Mini BNC Plug Connector Specifications

Material and Finish

Shells, Bodies, Mtg Nuts
Washers
Ferrule
Center Contacts
Dielectrics

Brass, nickel plated
Stainless Steel, nickel plated
Copper or Brass, tin plated
Phos Bronze and Brass, gold plated
PTFE

Electrical Characteristics

Frequency
Nominal Impedance
Voltage Rating
VSWR

Insulation Resistance
Dielectric Withstanding Voltage
Contact Resistance

DC – 2 GHz
75 ohms
300 Volts (VRMS maximum) @ Sea Level
1.10 max to 500 MHz (Return Loss -26.4 dB)
1.16 max to 1 GHz (Return Loss -22.6 dB)
1,000 megohms minimum
1,000 Volts (VRMS maximum) @ Sea Level
12 milliohms maximum

Mechanical Characteristics

Connector Durability
Force to Engage
Force to Disengage
Center Contact Retention
Cable Retention
Vibration

500 mating cycles
7 pounds maximum
1 pound minimum
2 pounds minimum
20 pounds minimum
EIA-364-28, Test Condition VII, Condition D
EIA-364-27, Method H

Shock

Environmental Characteristics

Temperature Rating
Moisture Resistance
Thermal Shock

-40 to +85°C
EIA-364-31, Method II, Condition C
EIA-364-32

Cable Specifications

Construction

Center Conductor: 26AWG Silver Plated Solid Copper
Conductor Diameter: 0.0161" +/- 0.0002" (.409 +/- .005mm)

Dielectric: Foamed Polyethylene (FPE)

Diameter Over Dielectric: 0.077" (2.0mm) Nom.
Wall Thickness: 0.030" (.76mm) Nom.

Shield: Foil: Aluminum/Poly Tape (Bonded)

100% Coverage
Diameter Over Foil: 0.082" +/- 0.003" (2.1 +/- .08mm) Nom.
Braid: 36 AWG Tinned Copper
95% Coverage Minimum
Diameter Over Braid: 0.108" +/- 0.003" (2.74 +/- .08mm) Nom.

Jacket: Grey Polyvinylchloride (PVC)

Diameter Over Jacket: 0.134" +/- 0.003" (3.4 +/- .08mm)
Coax Jacket Thickness: 0.013" (.33mm) Nom.

Overall Jacket: Grey Polyvinylchloride (PVC)

Jacket Thickness: 0.022" (.56 mm) Nom.

Electrical Properties

Sparker Test: 6000 VAC
Dielectric Strength: Conductor to Shield: 3 Sec. @ 2500 VDC
Shield to Shield: 1200 VDC

Capacitance: 18.0 pF/ft. (59.1 +/- .7pF/m)
Impedance: 75.0 +/- 2.0 Ohms (5-150 MHz)
Velocity of Propagation: 78% Nom.

DCR:
Conductor: 40 Ohms/1000ft. (130 Ohms/km) Max
SRL: 32 dB Min (5-150 MHz) 100% Swept Tested

Mechanical Properties

Recommended Minimum Bend Radius:
Installation (Under Load): 20 times Cable OD
Fixed (Unloaded): 10 times cable OD