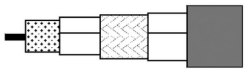
BELDEN



Product: CX9D1

Life Cycle Status: Discontinued

CX9D1 - Broadband Coax 9, 17 AWG Solid BC, Trishield, LSZH Jkt

Product Description

Broadband Coax 9, 17 AWG Solid Bare Copper Conductor, PE Insulation, Foil + 50% Tinned Copper Braid + Foil Shield, LSZH Jacket.

Technical Specifications

Product Overview

Suitable Applications:	Broadband, Cable Television (CATV), RF drop cable, Over-The-Air (OTA) antennas

Construction Details

Conductor

No. of Elements	Size	Stranding	Nom. Diameter	Material
1	18 AWG	Solid	1.1 mm	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter
PE - Polyethylene (Foam)	4.8 mm (0.19 in)

Table Notes:	Gas Injected

Outer Shield

Layer	Outer Shield Type	Material	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	100%
2	Braid	Tinned Copper (TC)	70%
3	Tape	Bi-Laminate (Alum+Poly)	100%

Table Notes:	Foil Tape has L-Fold and is bonded to the sheath

Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	7.1 mm

Table Notes:	According to European Standard EN 50290-2-20

Electrical Characteristics

Regularity of Impedance:	40 dB

Return Loss (RL)

Frequency	Min. Return Loss
30-470 MHz	27 dB
470-1000 MHz	24 dB
1000-2000 MHz	18 dB
2000-3000 MHz	16 dB

Attenuation

Frequency	Nom. Attenuation
5 MHz	1.5 dB/100m
50 MHz	4.0 dB/100m
100 MHz	5.7 dB/100m

200 MHz	8.2 dB/100m
400 MHz	11.8 dB/100m
600 MHz	14.7 dB/100m
800 MHz	17.2 dB/100m
1000 MHz	19.4 dB/100m
1350 MHz	23.0 dB/100m
1750 MHz	27.0 dB/100m
2000 MHz	28.7 dB/100m
2150 MHz	30.0 dB/100m
2400 MHz	32.0 dB/100m
3000 MHz	36.0 dB/100m

Table Notes:	Maximum attenuation is 10% higher

Electricals

Max. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
19 Ohm/km (5.8 Ohm/1000ft)	14 Ohm/km (4.3 Ohm/1000ft)	51 pF/m (16 pF/ft)	75 Ohm	86%

Transfer Impedance

Frequency	Max. Transfer Impedance
5-30 MHz	max. 2.5 mOhm/m

Screening

Frequency	Min. Screening Attenuation
30-1000 MHz	95 dB
1000-2000 MHz	85 dB
2000-3000 MHz	75 dB

Screening Class:	A+

Mechanical Characteristics

Temperature

Operating	Storage
-40°C To +70°C	-40°C To +70°C

Bend Radius

Stationary Min.
35 mm (1.4 in)

Max. Pull Tension:	60 N (13 lbf)
Bulk Cable Weight:	54 kg/km

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Dca
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Dca-s1,d1,a1
CENELEC Compliance:	EN 50117-1
UK Regulation Compliance:	UKCA Mark

History

Update and Revision:	Revision Number: 0.67 Revision Date: 07-29-2024