Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



7808R Coax - RG-8X Type



For more Information please call

1-800-Belden1



General Description:

RG-8X type, 15 AWG solid .057" bare copper conductor, gas-injected foam HDPE insulation, Duobond® II + tinned copper braid shield (95% coverage), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	15	Solid	BC - Bare Copper	1.4478

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	3.81

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Таре	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

Outer Jacket

Outer Jacket Material:

Outer Jacket Material PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 6.096 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	59.528 Kg/Km
Max. Recommended Pulling Tension:	329.167 N
Min. Bend Radius/Minor Axis:	63.500 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	8/X

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Flame Test		
UL Flame Test:	UL16	666 Vertical Shaft
CSA Flame Test:	FT4	
Suitability		
Suitability - Indoor:	Yes	
Plenum/Non-Plenum		
Plenum (Y/N):	No	
Electrical Characteristics (Overall)		
Nom. Characteristic Impedance:		
Impedance (Ohm)		
50		
Nom. Inductance:		
Inductance (µH/m)		
0.19686		
Nom. Capacitance Conductor to Shield:		
Capacitance (pF/m)		
75.463		
Nominal Velocity of Propagation:		
VP (%)		
86		
Nominal Delay:		
Delay (ns/m)		
3.87158		
Nom. Conductor DC Resistance:		
DCR @ 20°C (Ohm/km) 10.4992		
Nominal Outer Shield DC Resistance: DCR @ 20°C (Ohm/km)		
9.1868		
Maximum VSWR:		
Description Freq. (MHz) Start Freq. (MHz)	Stop Freg. (MHz) Max. VSWR	
	6000 1.25:1	
Nom. Attenuation:		
Freg. (MHz) Attenuation (dB/100m)		

Freq. (MHz)	Attenuation (dB/100m)
5.000	1.903
10.000	2.526
30.000	4.265
50.000	5.250
150.000	9.187
220.000	11.155
450.000	16.077
900.000	22.967
1500.000	29.857
1800.000	33.138
2000.000	35.107
2500.000	39.372
3000.000	43.965
3500.000	47.903
4500.000	54.793
5800.000	63.980
6000.000	64.964

Max. Power Rating:

Freq. (MHz)	Rating (W)
30.000	1526.000
50.000	1186.000
150.000	673.000
220.000	556.000
450.000	382.000
900.000	268.000
1500.000	205.000
1800.000	187.000

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2000.000	177.000
2500.000	156.000
3000.000	143.000
3500.000	132.000
4500.000	116.000
5800.000	102.000
6000.000	100.000

Max. Operating Voltage - UL:

300 V RMS

Sweep Test

100% Sweep tested to 6 GHz. Sweep Testing:

Misc. Information (Overall)

Notes (Overall)

Notes: Belden® The Wire in Wireless®

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7808R 0101000	1,000 FT	44.000 LB	BLACK	С	RF240 WIRELESS 500HM COAXFRPVC
7808R 010500	500 FT	21.500 LB	BLACK	С	RF240 WIRELESS 50OHM COAXFRPVC

Notes

C = CRATE REEL PUT-UP.

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