Detailed Specifications & Technical Data

ENGLISH 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. (in.)
1	15	Solid	BC - Bare Copper	.057

Total Number of Conductors:	1

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.150

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	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:	0.240 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	40 lbs/1000 ft.
Max. Recommended Pulling Tension:	74 lbs.
Min. Bend Radius/Minor Axis:	2.500 in.

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

Flame Test

UL Flame Test:	UL1666 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/ft)
.060

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
23.0

Nominal Velocity of Propagation:

VP (%)
86

Nominal Delay:

Delay (ns/ft)
1.18

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
3.2

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.8

Maximum VSWR:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
		5	6000	1.25:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5.000	0.580
10.000	0.770
30.000	1.300
50.000	1.600
150.000	2.800
220.000	3.400
450.000	4.900
900.000	7.000
1500.000	9.100
1800.000	10.100
2000.000	10.700
2500.000	12.000
3000.000	13.400
3500.000	14.600
4500.000	16.700
5800.000	19.500
6000.000	19.800

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

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:

Voltage
300 V RMS

Sweep Test

Sweep Testing: 100% Sweep tested to 6 GHz.

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	C	RF240 WIRELESS 50OHM COAXFRPVC
7808R 010500	500 FT	21.500 LB	BLACK	C	RF240 WIRELESS 50OHM COAXFRPVC

Notes:
C = CRATE REEL PUT-UP.

Revision Number: 7 Revision Date: 01-06-2014