Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

8232A Coax - RG-59/U Type

For more Information please call

1-800-Belden1

General Description:

20 AWG solid .032" bare copper conductor, gas-injected foam HDPE insulation, bare copper braid shields (95% and 80% coverage), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	20	Solid	BC - Bare Copper	.032

Total Number of Conductors:	1

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.145

Inner Shield

Inner Shield Material:

Type	Inner Shield Material	Coverage (%)
Braid	BC - Bare Copper	95

Inner Jacket

Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (in.)
PVC - Polyvinyl Chloride	.225

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	BC - Bare Copper	80

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter:	0.315 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
UL Temperature Rating:	60°C
Non-UL Temperature Rating:	75°C
Bulk Cable Weight:	63 lbs/1000 ft.
Max. Recommended Pulling Tension:	125 lbs.
Min. Bend Radius/Minor Axis:	3.250 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:	59/U

Flame Test

UL Flame Test:	UL1666 Vertical Shaft

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - When supported by a messenger wire

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	88232

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/ft)
0.097

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.2

Nominal Velocity of Propagation:

VP (%)
83

Nominal Delay:

Delay (ns/ft)
1.22

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
10.0

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.5

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.8

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	.3
3.6	.6
10	.9
71.5	2.1
135	3.0
270	4.2
360	4.8
540	5.9
720	7.0
750	7.1
1000	8.3
1500	10.5
2250	13.4
3000	15.9

Max. Operating Voltage - UL:

Voltage
300 V RMS

Minimum Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
5.000	850.000	21.000
850.000	4500.000	15.000

Sweep Test

Sweep Testing: 100% sweep tested 5 MHz to 4.5 GHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8232A 0101000	1,000 FT	68.000 LB	BLACK	C	#20 GIFHDLDPE BRD PVC BRD PVC

Notes:
C = CRATE REEL PUT-UP.

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