# **Detailed Specifications & Technical Data**



### METRIC 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)	
Physical Characteristics (Overall) Conductor	
AWG:	
# Coax AWG Stranding Conductor Material Dia. (mm)	
1 20 Solid BC - Bare Copper 0.8128	
Total Number of Conductors:	1
Insulation	
Insulation Material:	
Insulation Material Dia. (mn   Gas-injected FHDPE - Foam High Density Polyethylene 3.683	
Inner Shield	
Inner Shield Material:	
Type Inner Shield Material Coverage (%)   Braid BC - Bare Copper 95	
Inner Jacket	
Inner Jacket Material Nom. Dia. (mm)	
PVC - Polyvinyl Chloride 5.715	
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:	8.001 mm
	0.001 11111
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:	93.757 Kg/Km
Max. Recommended Pulling Tension:	556.025 N
Min. Bend Radius/Minor Axis:	82.550 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

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### 8232A Coax - RG-59/U Type

EU Rohs C			8232A Coax - RG-59/U 1
	Compliance Date (mm/dd/	/уууу):	01/01/2004
EU Directiv	ve 2002/96/EC (WEEE):		Yes
EU Directiv	ve 2003/11/EC (BFR):		Yes
CA Prop 65	5 (CJ for Wire & Cable):		Yes
	39 (China RoHS):		Yes
			59/U
RG Type:			39/0
UL Flame 1	last.		UL1666 Vertical Shaft
uitability			
Suitability	- Indoor:		Yes
Suitability			Yes
Suitability			Yes - When supported by a messenger wire
lenum/Non-I			No
Plenum (Y/			No
Plenum Nu	mber:		88232
ectrical Ch	aracteristics (Over	all)	
	istic Impedance:	,	
Impedance (	Ohm)		
75			
om. Inductanc	e:		
Inductance (	μH/m)		
0.318257			
om. Capacitan	ce Conductor to Shield:		
Capacitance	(pF/m)		
53.1522			
ominal Velocit	y of Propagation:		
VP (%)			
83			
65			
ominal Delay:			
ominal Delay: Delay (ns/m)			
ominal Delay:			
ominal Delay: Delay (ns/m) 4.00282 om. Conducto	r DC Resistance:		
ominal Delay: Delay (ns/m) 4.00282 om. Conducto DCR @ 20°C	r DC Resistance:		
ominal Delay: Delay (ns/m) 4.00282 om. Conducto DCR @ 20°C 32.81	r DC Resistance: (Ohm/km)		
ominal Delay: Delay (ns/m) 4.00282 om. Conducto DCR @ 20°C 32.81 om. Inner Shie	r DC Resistance: (Ohm/km)		
ominal Delay: Delay (ns/m) 4.00282 om. Conducto DCR @ 20°C 32.81 om. Inner Shie DCR @ 20°C	r DC Resistance: (Ohm/km)		
ominal Delay:   Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   oom. Inner Shie   DCR @ 20°C   8.2025	r DC Resistance: (Ohm/km) old DC Resistance: (Ohm/km)		
ominal Delay:   Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   ominal Outer \$	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance:		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   oominal Outer S   DCR @ 20°C	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance:		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   ominal Outer S   DCR @ 20°C   9.1868	r DC Resistance: (Ohm/km) old DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km)		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   oom. Inner Shie   DCR @ 20°C   8.2025   oominal Outer S   DCR @ 20°C   9.1868   oon. Attenuatio	r DC Resistance: (Ohm/km) old DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) on:		
Delay (ns/m)   4.00282   oom. Conducto   DCR @ 20°C   32.81   oom. Inner Shie   DCR @ 20°C   8.2025   oominal Outer S   DCR @ 20°C   9.1868   oom. Attenuatio   Freq. (MHz)	r DC Resistance: (Ohm/km) old DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km)		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   ominal Outer 3   DCR @ 20°C   9.1868   om. Attenuation   Freq. (MHz)   1	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) DD: Attenuation (dB/100m)		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   oominal Outer S   DCR @ 20°C   9.1868   om. Attenuation   Freq. (MHz)   1   3.6   10	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) Dn: Attenuation (dB/100m) 0.9843 1.9686 2.9529		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   oominal Outer S   DCR @ 20°C   9.1868   om. Attenuation   Freq. (MHz)   1   3.6   10   71.5	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) (Shield DC Resistance: (Shield DC R		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   oominal Outer S   DCR @ 20°C   9.1868   om. Attenuation   Freq. (MHz)   1   3.6   10   71.5   135	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) D: Shield D: Shield D:		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   oominal Outer S   DCR @ 20°C   9.1868   om. Attenuatic   Freq. (MHz)   1   3.6   10   71.5   135   270	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) (Shield DC Resistance: (Shield DC R		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   oominal Outer S   DCR @ 20°C   9.1868   om. Attenuatic   Freq. (MHz)   1   3.6   10   71.5   135   270   360	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) (Shield DC Resistance: (Shield D		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   ominal Outer S   DCR @ 20°C   9.1868   om. Attenuatic   Freq. (MHz)   1   3.6   10   71.5   135   270   360   540	r DC Resistance: (Ohm/km) Idd DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) (Shield DC Resistance: (Shield DC Resistanc		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   ominal Outer S   DCR @ 20°C   9.1868   om. Attenuatic   Freq. (MHz)   1   3.6   10   71.5   135   270   360   540   720	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) (Shield DC Resistance: (Shield D		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   ominal Outer S   DCR @ 20°C   9.1868   om. Attenuation   71.5   135   270   360   540   720   750	r DC Resistance: (Ohm/km) Idd DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) (Shield DC Resistance: (Ohm/km) (Shield DC Resistance: (Shield DC Resistan		
ominal Delay: Delay (ns/m) 4.00282 om. Conducto DCR @ 20°C 32.81 om. Inner Shie DCR @ 20°C 8.2025 ominal Outer S DCR @ 20°C 9.1868 om. Attenuatio Freq. (MHz) 1 3.6 10 71.5 135 270 360 540 720 750 1000 1500	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) (Shield DC Resistance: (Shield DC Resistance: (Sh		
Delay (ns/m)   4.00282   om. Conducto   DCR @ 20°C   32.81   om. Inner Shie   DCR @ 20°C   8.2025   oominal Outer S   DCR @ 20°C   9.1868   om. Attenuation   71.5   135   270   360   540   720   750   1000   1500   2250	r DC Resistance: (Ohm/km) Id DC Resistance: (Ohm/km) Shield DC Resistance: (Ohm/km) (Shield DC Resistance: (Shield DC Resistance		

Voltage 300 V RMS

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#### 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	С	#20 GIFHDLDPE BRD PVC BRD PVC

Notes: C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 07-24-2012

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