# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



## 1857A Coax - RG-59/U Type

For more Information please call

1-800-Belden1



# **General Description:**

22 AWG stranded (19x34) .031" bare copper conductor, foam polyethylene insulation, bare copper braid shields (95% coverage), Belflex® jacket.

# **Physical Characteristics (Overall)**

## Conductor

#### AWG:

# Coax	AWG	Stranding	<b>Conductor Material</b>	Dia. (mm)
1	22	19x34	BC - Bare Copper	0.7874

**Total Number of Conductors:** 

1

### Insulation

### **Insulation Material:**

Insulation Material	Dia. (mm)
FPE - Foam Polyethylene	3.6322

### **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. (mm)
PE - Polyethylene	5.4864

### **Outer Shield**

## **Outer Shield Material:**

	Outer Shield Material	Coverage (%)
Braid	BC - Bare Copper	95.000

## **Outer Jacket**

## **Outer Jacket Material:**

Outer Jacket Trade Name	Outer Jacket Material		
Belflex®	PVC Blend - Polyvinyl Chloride Blend		

## **Overall Cable**

Overall Nominal Diameter: 9.144 mm

# **Mechanical Characteristics (Overall)**

-35°C To +75°C
75°C
117.568 Kg/Km
551.577 N
95.250 mm

# **Applicable Specifications and Agency Compliance (Overall)**

**Applicable Standards & Environmental Programs** 

Page 1 of 3 10-30-2013

# **Detailed Specifications & Technical Data**

## **METRIC MEASUREMENT VERSION**



# 1857A Coax - RG-59/U Type

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
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black for permanent installations. All colors for field deployable use.
Plenum/Non-Plenum	
Plenum (Y/N):	No

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:

Inductance (µH/m) 0.318257

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 55.777

Nominal Velocity of Propagation:



**Nominal Delay:** 



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 45.934

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/km) 8.2025

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 5.2496

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	0.9843
3.6	1.6405
10	2.6248
71.5	7.2182
135	10.1711
270	14.7645
360	17.7174

Page 2 of 3 10-30-2013

# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



1857A Coax - RG-59/U Type

540	22.3108
720	26.5761
750	27.5604
1000	33.1381
1500	43.6373
2250	57.7456
3000	70.2134

### Max. Operating Voltage - Non-UL:

Voltage 300 V RMS

#### Minimum Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
5	850	21
851	3000	15

### **Sweep Test**

**Sweep Testing:** 100% Sweep tested 5 MHz to 3 GHz.

# **Notes (Overall)**

Notes: For use in field deployable applications where high flexibility, wide temperature range, and durability are required. Permanently indent printed for field identification.

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1857A B591000	305 MT	39.009 KG	BLACK, MATTE	С	#22 FLDPE VLDPE PVC TRIAX
1857A B59500	152 MT	19.278 KG	BLACK, MATTE	С	#22 FLDPE VLDPE PVC TRIAX
1857A 0021000	305 MT	39.009 KG	RED	С	#22 FLDPE VLDPE PVC TRIAX
1857A 0041000	305 MT	39.009 KG	YELLOW	С	#22 FLDPE VLDPE PVC TRIAX
1857A 004500	152 MT	19.278 KG	YELLOW		#22 FLDPE VLDPE PVC TRIAX
1857A 0061000	305 MT	39.009 KG	BLUE, LIGHT	С	#22 FLDPE VLDPE PVC TRIAX
1857A 0071000	305 MT	39.009 KG	VIOLET	С	#22 FLDPE VLDPE PVC TRIAX

### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 09-19-2012

© 2013 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.