# **Detailed Specifications & Technical Data**

# **ENGLISH MEASUREMENT VERSION**



# 7787A Coax - Bundled Miniature

For more Information please call

1-800-Belden1



# **General Description:**

Miniature, 23 AWG solid .023" bare copper conductors, solid copper, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), overall PVC jacket.

# **Physical Characteristics (Overall)**

# Conductor

## AWG:

# Coax	AWG	Stranding	<b>Conductor Material</b>	Dia. (in.)
3	23	Solid	BC - Bare Copper	.023

Total Number of Conductors: 3

## Insulation

## **Insulation Material:**

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.102

## **Inner Shield**

# Inner Shield Material:

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

# **Inner Jacket**

## Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (in.)
PVC - Polyvinyl Chloride	.159

# **Inner Jacket Color Code Chart:**

Number	Color
1	Red
2	Green
3	Blue

## **Outer Jacket**

## **Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

## **Overall Cable**

Overall Nominal Diameter: 0.440 in.

Mechanical Characteristics (Overall)	
Operating Temperature Range:	-35°C To +75°C
UL Temperature Rating:	60°C
Non-UL Temperature Rating:	75°C
Bulk Cable Weight:	85 lbs/1000 ft.
Max. Recommended Pulling Tension:	108 lbs.
Min. Bend Radius/Minor Axis:	4.500 in.

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<b>Applicable Specifications and Agency Cor</b>	npliance (Overall)					
Applicable Standards & Environmental Progra	Applicable Standards & Environmental Programs					
NEC/(UL) Specification:	CMR					
CEC/C(UL) Specification:	CMG					
EU Directive 2011/65/EU (ROHS II):	Yes					
EU CE Mark:	Yes					
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:	Mini					
Flame Test						
UL Flame Test:	UL1666 Vertical Shaft					
CSA Flame Test:	FT4					
Suitability						
Suitability - Indoor:	Yes					
Suitability - Outdoor:	Yes					
Plenum/Non-Plenum						
Plenum (Y/N):	No					
Floctrical Characteristics (Overall)						

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm)
75.000

Nom. Inductance:



Nom. Capacitance Conductor to Shield:



**Nominal Velocity of Propagation:** 



**Nominal Delay:** 



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 20.1

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 7.6

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

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## 7787A Coax - Bundled Miniature

1	0.4
3.6	0.8
10	1.2
71.5	3.1
135	3.8
270	5.4
360	6.2
540	7.7
720	9.1
750	9.5
1000	10.5
1500	13.0
2500	16.9
3000	18.5

#### Max. Operating Voltage - UL:

Voltage 300 V RMS

Other Electrical Characteristic 1:

Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2

using a 75 Ohm fixed bridge and termination.

Other Electrical Characteristic 2:

Return Loss Tested in Accordance With ASTM D-4566 Paragraph 45.3, Using a 75 Ohm Fixed Bridge and Termination.

#### Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	850	23
851	3000	15

#### **Sweep Test**

**Sweep Testing:** 

Sweep tested 5 MHz to 3 GHz.

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7787A B591000	1,000 FT	94.000 LB	BLACK, MATTE	С	3 #23 PE/GIFHDPE SH PVC PVC
7787A B59500	500 FT	47.500 LB	BLACK, MATTE	С	3 #23 PE/GIFHDPE SH PVC PVC

#### Notes:

C = CRATE REEL PUT-UP.

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