# **Detailed Specifications & Technical Data**



METRIC MEASUREMENT VERSION

## 1281R Coax - 75 Ohm Miniature Coax

For more Information please call

1-800-Belden1



## **General Description:**

25 AWG solid .018" tinned copper conductor, gas-injected foam HDPE insulation, lightly bonded aluminum foil-polyester tape-aluminum foil shield with a 95% tinned copper braid shield, PVC jacket.

### **Usage (Overall)**

Suitable Applications:

Analog video, digital video, Mini Hi-Res, video, VGA, SVGA, 825, RGB, Composite Video, ComponentVideo, Video Distribution, Graphic Displays, special effects editing, animation, post production. Home Theater, boardroms, office, casino, church, synagogue, house of worship, teleconferencing, digital

# **Physical Characteristics (Overall)**

## Conductor

## AWG:

# Coax	AWG	Stranding	<b>Conductor Material</b>	Dia. (mm)
1	25.0	Solid	TC - Tinned Copper	0.4572

Total Number of Conductors:

#### Insulation

#### Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	1.8796

#### **Outer Shield**

#### Outer Shield Material:

Layer # Outer Shield Trade Name		Туре	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Таре	Light Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

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#### **Outer Jacket**

### Outer Jacket Material:

Outer Jacket Material

PVC - Polyvinyl Chloride

## **Overall Cable**

Overall Nominal Diameter:

2.896 mm

CMR

-20°C To +75°C
60°C
75°C
11.906 Kg/Km
102.309 N
38.100 mm

# Applicable Specifications and Agency Compliance (Overall)

# Applicable Standards & Environmental Programs

NEC/(UL) Specification:

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CEC/C(UL) Specification:	CMG
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	06/25/2005
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
Flame Test	
UL Flame Test:	UL1666 Vertical Riser
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Plenum/Non-Plenum	
Plenum (Y/N):	No

# **Electrical Characteristics (Overall)**

No	Nom. Characteristic Impedance:					
	Impedance (Ohm)					
	75					

Nom. Inductance:

Inductance (µH/m)

0.347786

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

55.777

Nominal Velocity of Propagation:

**VP (%)** 80

Nominal Delay:

**Delay (ns/m)** 4.06844

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

111.554

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

17.7174

## Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)				
1	1.70612				
5	3.83877				
50	12.1397				
100	16.0769				
200	21.9827				
400	31.1695				
700	43.9654				
900	49.215				
1000	51.8398				
3000	102.367				



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#### Max. Operating Voltage - UL:

	Voltage 300 V RMS					
	Other Ele	ctrical Cha	racteristic 1:			sted in accordance with ASTM D-4566 paragraph 43.2, option 2 im fixed bridge and termination. 75 +/- 3 Ohms
	Other Ele	ctrical Cha	racteristic 2:			ested in accordance with ASTM D-4566 paragraph 45.3, using a bridge and termination.
Mi	nimum Ret	urn Loss:				
	Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)	
			5	850	20	

#### Sweep Test

Sweep Testing:

100% Sweep tested 5 MHz to 850 MHz.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1281R 0101000	305 MT	4.536 KG	BLACK	С	#25LDPE/GIFHDLDPE SH FRPVC

Notes:

C = CRATE REEL PUT-UP.

#### **Test Reports**

a) UL

i) UL Test Reports are available on-line through the UL Client Document Access web portal.
ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

b) CSA

i) CSA ' 'Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.

ií) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

\* other test data may be available if requested at time of order.

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