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, boardrooms, office, casino, church, synagogue, house of worship, teleconferencing, digital

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	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:

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

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 2.896 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +75°C
UL Temperature Rating:	60°C
Non-UL Temperature Rating:	75°C
Bulk Cable Weight:	11.906 Kg/Km
Max. Recommended Pulling Tension:	102.309 N
Min. Bend Radius/Minor Axis:	38.100 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 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

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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)

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

Max. Operating Voltage - UL:

Voltage 300 V RMS

Other Electrical Characteristic 1: Impedance tested in accordance with ASTM D-4566 paragraph 48.2, option 2 using a 75 Ohm fixed bridge and termination. 75 +/- 3 Ohms

and termination. 75 17-5 on

Other Electrical Characteristic 2: Return Loss tested in accordance with ASTM D-4566 paragraph 50.3, using a 75 Ohm fixed bridge and termination

Minimum Return Loss:

 Description
 Freq. (MHz)
 Start Freq. (MHz)
 Stop Freq. (MHz)
 Min. RL (dB)

 5
 850
 20

Sweep Test

Sweep Testing: 1008#37; Sweep tested 5 MHz to 850 MHz.

Put Ups and Colors:

Item # Putup Ship Weight Color Notes Item Desc
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1281R 0101000	1,000 FT	10.000 LB	BLACK	С	#25LDPE/GIFHDLDPE SH FRPVC
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Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 02-11-2013

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