Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



4855R Coax - 4K Ultra-High-Definition Coax Cable for 12G-SDI - Mini



For more Information please call

1-800-Belden1



General Description:

12 GHz, 4K UHD Precision Video Cable, 75 Ohm, 23 AWG solid .023" silver plated copper conductor, gas-injected foam HDPE insulation, Duofoil® bonded to the core + tinned copper braid shield (95% coverage), PVC jacket.

Usage (Overall)

Suitable Applications: SMPTE 2082-1 12 Gb/s UHDTV, SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	23	Solid	SPC - Silver Plated Copper	0.023

Total Number of Conductors:

Insulation

Insulation Material:

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

Outer Shield

Outer Shield Material:

Layer # Outer Shield Trade Name Ty		Type	Outer Shield Material	Coverage (%)	Description
1	Bonded Duofoil®	Таре	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000	Bonded to insulation
2		Braid	TC - Tinned Copper	95.000	

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.159 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +75°C
Bulk Cable Weight:	17 lbs/1000 ft.
Max. Recommended Pulling Tension:	40 lbs.
Min. Bend Radius/Minor Axis:	1.600 in.

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:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	11/08/2016
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

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RG Type:	Sub-miniature 59/U		
Flame Test			
UL Flame Test:	UL1666 Vertical Shaft		
CSA Flame Test:	FT4		
Suitability			
Suitability - Indoor:	Yes		
Suitability - Outdoor:	Yes - Black only.		
Suitability - Aerial:	Yes - Black only, when supported by messenger wire.		
Suitability - Burial:	No		
Plenum/Non-Plenum			
Plenum (Y/N):	No		

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 19.700

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 3.900

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.390
3.580	0.780
5.000	0.920
6.000	1.000
7.000	1.080
10.000	1.200
12.000	1.300
25.000	1.800
55.000	2.600
67.500	2.830
71.500	2.930
88.500	3.220
100.000	3.390
135.000	3.840
143.000	4.000
180.000	4.410
270.000	5.440
360.000	6.340
540.000	7.850
720.000	9.090
750.000	9.280
1000.000	10.800
1500.000	13.200
2000.000	15.300
2250.000	16.300

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3000.000	19.000
4500.000	23.600
6000.000	27.700
12000.000	41.200

Max. Operating Voltage - UL:

Voltage 300 V RMS

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000
4500.000	12000.000	15.000

Sweep Test

Sweep Testing: Sweep tested 5 MHz to 12 GHz

Notes (Overall)

Notes: Print legend includes sequential footage marks

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
4855R N3U1000	1,000 FT	19.000 LB	GREEN, MIL		#23 PE/GIFHDPE SH PVC
4855R 0021000	1,000 FT	19.000 LB	RED		#23 PE/GIFHDPE SH PVC
4855R 0031000	1,000 FT	19.000 LB	ORANGE		#23 PE/GIFHDPE SH PVC
4855R 0041000	1,000 FT	19.000 LB	YELLOW		#23 PE/GIFHDPE SH PVC
4855R 0061000	1,000 FT	19.000 LB	BLUE, LIGHT		#23 PE/GIFHDPE SH PVC
4855R 0071000	1,000 FT	19.000 LB	VIOLET		#23 PE/GIFHDPE SH PVC
4855R 0101000	1,000 FT	19.000 LB	BLACK		#23 PE/GIFHDPE SH PVC
4855R 0105000	5,000 FT	90.000 LB	BLACK	CZ	#23 PE/GIFHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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