

## 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. (mm)
1	23	Solid	SPC - Silver Plated Copper	0.584

**Total Number of Conductors:** 1

#### Insulation

**Insulation Material:**

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	2.5908

#### Outer Shield

**Outer Shield Material:**

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)	Description
1	Bonded Duofoil®	Tape	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:** 4.039 mm

### Mechanical Characteristics (Overall)

**Operating Temperature Range:** -30°C To +75°C

**Bulk Cable Weight:** 25.299 Kg/Km

**Max. Recommended Pulling Tension:** 177.928 N

**Min. Bend Radius/Minor Axis:** 40.640 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 CE Mark:** Yes

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

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
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
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## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (µH/m)

0.351067

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

53.4803

### Nominal Velocity of Propagation:

VP (%)

82

### Nominal Delay:

Delay (ns/m)

4.068

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

64.636

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

12.796

### Nom. Attenuation:

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

1.000	1.280
3.580	2.559
5.000	3.019
6.000	3.281
7.000	3.543
10.000	3.937

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

12.000	4.265
25.000	5.906
55.000	8.531
67.500	9.285
71.500	9.613
88.500	10.565
100.000	11.123
135.000	12.599
143.000	13.124
180.000	14.469
270.000	17.849
360.000	20.802
540.000	25.756
720.000	29.824
750.000	30.448
1000.000	35.435
1500.000	43.309
2000.000	50.199
2250.000	53.480
3000.000	62.339
4500.000	77.432
6000.000	90.884
12000.000	135.177

### 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 N3U10000	10,000 FT	170.000 LB	GREEN, MIL		#23 PE/GIFHDLDPE SH PVC
4855R N3U5000	5,000 FT	90.000 LB	GREEN, MIL		#23 PE/GIFHDLDPE SH PVC
4855R 0021000	1,000 FT	19.000 LB	RED		#23 PE/GIFHDPE SH PVC
4855R 00210000	10,000 FT	170.000 LB	RED		#23 PE/GIFHDLDPE SH PVC
4855R 0025000	5,000 FT	90.000 LB	RED		#23 PE/GIFHDLDPE SH PVC
4855R 0031000	1,000 FT	19.000 LB	ORANGE		#23 PE/GIFHDPE SH PVC
4855R 00310000	10,000 FT	170.000 LB	ORANGE		#23 PE/GIFHDLDPE SH PVC
4855R 0035000	5,000 FT	90.000 LB	ORANGE		#23 PE/GIFHDLDPE SH PVC
4855R 0041000	1,000 FT	19.000 LB	YELLOW		#23 PE/GIFHDPE SH PVC
4855R 00410000	10,000 FT	170.000 LB	YELLOW		#23 PE/GIFHDLDPE SH PVC
4855R 0045000	5,000 FT	90.000 LB	YELLOW		#23 PE/GIFHDLDPE SH PVC
4855R 0061000	1,000 FT	19.000 LB	BLUE, LIGHT		#23 PE/GIFHDPE SH PVC
4855R 00610000	10,000 FT	170.000 LB	BLUE, LIGHT		#23 PE/GIFHDLDPE SH PVC
4855R 0065000	5,000 FT	90.000 LB	BLUE, LIGHT		#23 PE/GIFHDLDPE SH PVC
4855R 0071000	1,000 FT	19.000 LB	VIOLET		#23 PE/GIFHDPE SH PVC
4855R 00710000	10,000 FT	170.000 LB	VIOLET		#23 PE/GIFHDLDPE SH PVC
4855R 0075000	5,000 FT	90.000 LB	VIOLET		#23 PE/GIFHDLDPE SH PVC
4855R 00910000	10,000 FT	170.000 LB	WHITE		#23 PE/GIFHDLDPE SH PVC

## METRIC MEASUREMENT VERSION

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

4855R 0095000	5,000 FT	90.000 LB	WHITE		#23 PE/GIFHDLPE SH PVC
4855R 0101000	1,000 FT	19.000 LB	BLACK		#23 PE/GIFHDPE SH PVC
4855R 01010000	10,000 FT	170.000 LB	BLACK		#23 PE/GIFHDLPE SH PVC
4855R 0105000	5,000 FT	90.000 LB	BLACK	C Z	#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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