



**Product:** <u>4855R</u> ☑

4K UHD Coax for 12G-SDI, 75 Ohm, Mini RG-59, 23 AWG Solid SC, Foil + 95% TC Braid, PVC Jkt, CMR

# **Product Description**

12 GHz, 4K UHD Precision Video Cable, Mini RG-59, 75 Ohm 23 AWG solid 0.023" silver-plated copper conductor, gas-injected foamed high-density polyethylene insulation, Duofoil® bonded to the core + tinned copper braid shield (95% coverage), PVC Jacket

# **Technical Specifications**

### **Product Overview**

Suitable Applications:	Ultra-High Definition Digital Video, 4K Single-link 12 Gb/s UHDTV, 4K D-Cinema, 8K Quad-link UHDTV, HD-SDI 1080p
<b>Construction Details</b>	
RG Type:	Mini 59

### Conductor

Size	Stranding	Nom. Diameter	Material
23 AWG	Solid	0.023 in	SC - Silvered Copper

#### Insulation

Material	Nom. Insulation Diameter	Color Code	Notes
PE - Polyethylene (Foam)	0.102 in (2.59 mm)	White	Gas Injected

#### Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Таре	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
2	Braid	Tinned Copper (TC)		95%

### Outer Jacket

	Material	Nom. Diameter
F	PVC - Polyvinyl Chloride	0.159 in (4.04 mm)
(	Overall Cable Diameter (	Nominal): 0.159 in (4

### **Electrical Characteristics**

## Return Loss (RL)

Frequency	Min. Return Loss
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB
4500 - 12000 MHz	15 dB

# Attenuation

Frequency	Nom. Attenuation
1 MHz	0.39 dB/100ft
3.58 MHz	0.78 dB/100ft
5 MHz	0.92 dB/100ft
6 MHz	1 dB/100ft
7 MHz	1.08 dB/100ft
10 MHz	1.2 dB/100ft

12 MHz 1.3 dB/100ft 25 MHz 2.6 dB/100ft 67.5 MHz 2.63 dB/100ft 71.5 MHz 2.93 dB/100ft 88.5 MHz 3.22 dB/100ft 100 MHz 3.39 dB/100ft 143 MHz 4.00 dB/100ft 143 MHz 4.00 dB/100ft 180 MHz 5.44 dB/100ft 540 MHz 7.85 dB/100ft 720 MHz 9.09 dB/100ft 750 MHz 9.28 dB/100ft 1000 MHz 13.2 dB/100ft 1500 MHz 13.2 dB/100ft 1500 MHz 13.2 dB/100ft 1500 MHz 15.3 dB/100ft 15000 MHz 15000		
55 MHz 2.6 dB/100ft 67.5 MHz 2.83 dB/100ft 71.5 MHz 2.93 dB/100ft 88.5 MHz 3.22 dB/100ft 100 MHz 3.39 dB/100ft 135 MHz 4.00 dB/100ft 143 MHz 4.00 dB/100ft 180 MHz 5.44 dB/100ft 540 MHz 7.85 dB/100ft 720 MHz 9.09 dB/100ft 750 MHz 9.28 dB/100ft 1000 MHz 10.8 dB/100ft 1500 MHz 13.2 dB/100ft 1500 MHz 15.3 dB/100ft 1500 MHz 15.3 dB/100ft 1250 MHz 15.3 dB/100ft 16.3 dB/100ft 17.00 MHz 17.0 dB/100ft 17.0 dB/100f	12 MHz	1.3 dB/100ft
67.5 MHz 2.83 dB/100ft 71.5 MHz 2.93 dB/100ft 88.5 MHz 3.22 dB/100ft 100 MHz 3.39 dB/100ft 135 MHz 4.00 dB/100ft 180 MHz 4.41 dB/100ft 270 MHz 5.44 dB/100ft 540 MHz 7.85 dB/100ft 720 MHz 9.09 dB/100ft 720 MHz 10.8 dB/100ft 720 MHz 10.8 dB/100ft 720 MHz 10.8 dB/100ft 720 MHz 10.8 dB/100ft 1000 MHz 10.8 dB/100ft 1500 MHz 13.2 dB/100ft 2000 MHz 15.3 dB/100ft 2250 MHz 16.3 dB/100ft 3000 MHz 19.0 dB/100ft 4500 MHz 23.6 dB/100ft 6000 MHz 27.7 dB/100ft	25 MHz	1.8 dB/100ft
71.5 MHz 2.93 dB/100ft 88.5 MHz 3.22 dB/100ft 100 MHz 3.39 dB/100ft 135 MHz 4.00 dB/100ft 143 MHz 4.00 dB/100ft 180 MHz 5.44 dB/100ft 540 MHz 7.85 dB/100ft 720 MHz 9.09 dB/100ft 750 MHz 10.8 dB/100ft 1000 MHz 10.8 dB/100ft 1500 MHz 13.2 dB/100ft 1500 MHz 15.3 dB/100ft 2250 MHz 16.3 dB/100ft 16.3 dB/100ft 19.0 dB/100ft 19.0 dB/100ft 19.0 dB/100ft 250 MHz 15.3 dB/100ft 250 MHz 19.0 dB/100ft 4500 MHz 23.6 dB/100ft 23.6 dB/100ft 23.6 dB/100ft 27.7 dB	55 MHz	2.6 dB/100ft
88.5 MHz 3.22 dB/100ft 100 MHz 3.39 dB/100ft 135 MHz 3.84 dB/100ft 143 MHz 4.00 dB/100ft 180 MHz 4.41 dB/100ft 270 MHz 5.44 dB/100ft 360 MHz 6.34 dB/100ft 720 MHz 9.09 dB/100ft 720 MHz 9.09 dB/100ft 750 MHz 10.8 dB/100ft 1000 MHz 10.8 dB/100ft 1500 MHz 13.2 dB/100ft 2000 MHz 15.3 dB/100ft 2250 MHz 16.3 dB/100ft 3000 MHz 19.0 dB/100ft 4500 MHz 23.6 dB/100ft 6000 MHz 27.7 dB/100ft	67.5 MHz	2.83 dB/100ft
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2250 MHz 16.3 dB/100ft 3000 MHz 19.0 dB/100ft 4500 MHz 23.6 dB/100ft 6000 MHz 27.7 dB/100ft	1500 MHz	13.2 dB/100ft
3000 MHz 19.0 dB/100ft 4500 MHz 23.6 dB/100ft 6000 MHz 27.7 dB/100ft	2000 MHz	15.3 dB/100ft
4500 MHz 23.6 dB/100ft 6000 MHz 27.7 dB/100ft	2250 MHz	16.3 dB/100ft
6000 MHz 27.7 dB/100ft	3000 MHz	19.0 dB/100ft
	4500 MHz	23.6 dB/100ft
12000 MHz 41.2 dB/100ft	6000 MHz	27.7 dB/100ft
	12000 MHz	41.2 dB/100ft

### Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
19.7 Ohm/1000ft	3.8 Ohm/1000ft (12 Ohm/km)	16.3 pF/ft (53.5 pF/m)	75 Ohm	82%

# Voltage

UL Voltage Rating
300 V RMS (CMR, CMG)

# **Mechanical Characteristics**

# Temperature

UL Temperature	Operating
60°C	-30°C to +75°C

# Bend Radius

Installation Min.
1.6 in (41 mm)

Max. Pull Tension:	33 lbs (15 kg)
Bulk Cable Weight:	17 lbs/1000ft

# **Standards and Compliance**

Environmental Suitability:	Indoor - Riser, Indoor, Aerial - Black only, When supported by messenger wire
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1666 Vertical Shaft
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	CMR
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Plenum Number:	4855P

# History

Update and Revision:	Revision Number: 0.388 Revision Date: 04-26-2023

# **Part Numbers**

# Variants

Item #	Color	Putup Type	Length	UPC	Footnote
4855R 0101000	Black	Reel	1,000 ft	612825390572	
4855R 0105000	Black	Reel	5,000 ft	612825390589	CZ
4855R 01010000	Black	Reel	10,000 ft	612825436362	
4855R 0061000	Blue, Light	Reel	1,000 ft	612825395362	
4855R 0065000	Blue, Light	Reel	5,000 ft	612825436591	
4855R 00610000	Blue, Light	Reel	10,000 ft	612825436218	
4855R N3U5000	Green, Mil	Reel	5,000 ft	612825436652	
4855R N3U10000	Green, Mil	Reel	10,000 ft	612825436447	
4855R N3U1000	Mil Green	Reel	1,000 ft	612825395355	
4855R 0031000	Orange	Reel	1,000 ft	612825395249	
4855R 0035000	Orange	Reel	5,000 ft	612825436560	
4855R 00310000	Orange	Reel	10,000 ft	612825436195	
4855R 0071000	Purple	Reel	1,000 ft	612825395263	
4855R 0021000	Red	Reel	1,000 ft	612825395232	
4855R 0025000	Red	Reel	5,000 ft	612825436522	
4855R 00210000	Red	Reel	10,000 ft	612825436164	
4855R 0075000	Violet	Reel	5,000 ft	612825436607	
4855R 00710000	Violet	Reel	10,000 ft	612825436225	
4855R 0095000	White	Reel	5,000 ft	612825436645	
4855R 00910000	White	Reel	10,000 ft	612825436461	
4855R 0041000	Yellow	Reel	1,000 ft	612825395256	
4855R 0045000	Yellow	Reel	5,000 ft	612825436584	
4855R 00410000	Yellow	Reel	10,000 ft	612825436201	

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