

Part Number: 4855R

12 GHz Coax, 4K UHD Precision Video Cable, RG-59 Mini, 75 Ohm, 23 AWG Solid, CMR

Product Description

12 GHz Coax, 4K UHD Precision Video Cable, RG-59 Mini, 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.

Technical Specifications

Product Overview

Environmental Space:	Outdoor - Aerial
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	Stranding	Material	Nominal Diameter	No. of Coax
23	Solid	SPC - Silver Plated Copper	0.023 in	1

Conductor Size:	23 AWG

Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.102 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Bonded Duofoil® (Bonded to Dielectric)	100 %
Braid	2	TC - Tinned Copper		95 %

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.159 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
19.7 Ohm/1000ft	3.9 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.3 pF/ft

Inductance

Nominal Inductance
0.107 µH/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB
4500 MHz - 12000 MHz	15 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
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	1.8 dB/100ft
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	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
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
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
12000 MHz	41.2 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	82 %

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	Return Loss: Fixed bridge and termination
Other Electrical Characteristic 2:	Percent test

Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-30°C To +75°C

Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	17 lbs/1000ft
Max Recommended Pulling Tension:	40 lbs
Min Bend Radius/Minor Axis:	1.6 in

Standards

NEC/(UL) Specification:	CMR

CEC/C(UL) Specification:	CMG
CPR Euroclass:	Eca
RG Type:	Mini 59/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	UPC	Length	Footnote
4855R 0101000	Black	612825390572	1,000 ft	
4855R 0105000	Black	612825390589	5,000 ft	C Z
4855R 0061000	Blue, Light	612825395362	1,000 ft	
4855R N3U1000	Mil Green	612825395355	1,000 ft	
4855R 0031000	Orange	612825395249	1,000 ft	
4855R 0071000	Purple	612825395263	1,000 ft	
4855R 0021000	Red	612825395232	1,000 ft	
4855R 0041000	Yellow	612825395256	1,000 ft	

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

Product Notes

Notes:	Print legend includes sequential footage marks.

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