



Product: <u>4855P</u> ☑

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

Product Description

12 GHz, 4K UHD Precision Video Coax, 75 Ohm Mini RG-59 Type 23 AWG solid silver plated copper conductor, foam FEP core, Duofoil® bonded to core+95% tinned copper braid, CMP, Flamarrest® jacket

Technical Specifications

Product Overview

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

Insulation

Material	Nominal Diameter
Gas-injected FEP - Foam Florinated Ethylene Propylene	0.102 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Bonded Duofoil® (Bonded to Dielectric)	100.0 %
Braid	2	TC - Tinned Copper		95.0 %

Outer Jacket Material

Material	Nominal Diameter	
LS PVC - Low Smoke Polyvinyl Chloride	0.159 in	

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
20.1 Ohm/1000ft	3.8 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield 16.6 pF/ft

Inductance

Nominal Inductance

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	0.91 dB/100ft
6 MHz	1.00 dB/100ft
7 MHz	1.07 dB/100ft
10 MHz	1.26 dB/100ft
12 MHz	1.37 dB/100ft
25 MHz	1.91 dB/100ft
55 MHz	2.72 dB/100ft
67.5 MHz	2.99 dB/100ft
71.5 MHz	3.06 dB/100ft
88.5 MHz	3.38 dB/100ft
100 MHz	3.58 dB/100ft
135 MHz	4.13 dB/100ft
143 MHz	4.25 dB/100ft
180 MHz	4.75 dB/100ft
270 MHz	5.86 dB/100ft
360 MHz	6.85 dB/100ft
540 MHz	8.58 dB/100ft
720 MHz	10.11 dB/100ft
750 MHz	10.34 dB/100ft
1000 MHz	12.17 dB/100ft
1500 MHz	15.25 dB/100ft
2000 MHz	17.94 dB/100ft
2250 MHz	19.17 dB/100ft
3000 MHz	22.65 dB/100ft
4500 MHz	28.71 dB/100ft
6000 MHz	33.96 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]	
1.27 ns/ft	80.0 %	

Voltage

UL Voltage Rating 300 V RMS

Electrical Characteristics Notes: Return Loss: Fixed bridge and termination

Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

UV Resistance:	No
Bulk Cable Weight:	18 lbs/1000ft
Max Recommended Pulling Tension:	40 lbs
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Min Bend Radius/Minor Axis:	1.5 in
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Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
RG Type:	Mini 59/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2018-03-26
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Flammability, LS0H, Toxicity Testing

UL	. Flammability:	NFPA 262
CS	SA Flammability:	FT6
UL	voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes	

Part Number

Non-Plenum Number:	4855R		
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Variants

Item #	Color	UPC	Length
4855P 0101000	Black	612825419785	1,000 ft
4855P 0061000	Blue	612825419761	1,000 ft
4855P 0051000	Green	612825419754	1,000 ft
4855P 0031000	Orange	612825419747	1,000 ft
4855P 0021000	Red	612825419730	1,000 ft
4855P 0071000	Violet	612825419778	1,000 ft

History

Update and Revision:	Revision Number: 0.41 Revision Date: 01-31-2020

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