



Product: [4855P](#)

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
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
23	Solid	SC - Silvered Copper	0.023 in	1

Insulation

Material	Nominal Diameter
FEP - Fluorinated Ethylene Propylene (Foam)	0.102 in

Table Notes:	Gas Injected
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Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%

Outer Jacket

Material	Nominal Diameter
PVC - 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
0.3 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	0.91 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
12000 MHz	50.95 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.27 ns/ft	80%

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	Return Loss: Fixed bridge and termination
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Temperature Range

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

Mechanical Characteristics

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

Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	CMP

RG Type:	Mini 59
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Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

Suitability

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

Flammability, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Related Part Numbers

Non-Plenum Number:	4855R
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Variants

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

History

Update and Revision:	Revision Number: 0.139 Revision Date: 11-09-2022
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