

# Product: <u>4855ANH</u>

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

# **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), LSZH jacket.

# **Technical Specifications**

#### **Product Overview**

Environmental Space:	Indoor - Euroclass Dca
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 Diamete	
Gas-injected FHDPE - Foam High Density Polyethylene	0.102 in	

#### **Outer Shield Material**

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

#### **Outer Jacket Material**

Material	Nominal Diameter
LSZH / FRNC	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

#### 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 MHz	0.39 dB/100ft
3.58 MHz MHz	0.78 dB/100ft
5 MHz MHz	0.92 dB/100ft
6 MHz MHz	1 dB/100ft
7 MHz MHz	1.08 dB/100ft
10 MHz MHz	1.2 dB/100ft
12 MHz MHz	1.3 dB/100ft
25 MHz MHz	1.8 dB/100ft
55 MHz MHz	2.6 dB/100ft
67.5 MHz MHz	2.83 dB/100ft
71.5 MHz MHz	2.93 dB/100ft
88.5 MHz MHz	3.22 dB/100ft
100 MHz 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	82.0 %

## Voltage

Non-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

CPR Euroclass:	Dca
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 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

#### Plenum/Non-Plenum

Plenum (Y/N):	No

#### **Part Number**

Variants

ltem #	Color	UPC	Length
4855ANH G751000	Aqua	612825443353	305 m
4855ANH G751640	Aqua	612825443407	500 m
4855ANH G753280	Aqua	612825443452	100 m
4855ANH 0101000	Black	612825443391	305 m
4855ANH 0101640	Black	612825443445	500 m
4855ANH 0103280	Black	612825443490	100 m
4855ANH 0061000	Blue	612825443377	305 m
4855ANH 0061640	Blue	612825443421	500 m
4855ANH 0063280	Blue	612825443476	100 m
4855ANH N3U1000	Green	612825443360	305 m
4855ANH N3U1640	Green	612825443414	500 m
4855ANH N3U3280	Green	612825443469	100 m
4855ANH 0071000	Purple	612825443384	305 m
4855ANH 0071640	Purple	612825443438	500 m

#### **Product Notes**

Notes:	Print legend includes sequential footage marks.			
History				
Update and Revision:	Revision Number: 0.20 Revision Date: 08-22-2019			

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