Product: 1794A

75 Ohm SDI Coax, Series 7, 16 AWG, Solid BC, Tri-Shield, PVC Jkt, CMR

Product Description

75 Ohm SDI Coax, Series 7, 16 AWG Solid Bare Copper Conductor, PE Insulation, Foil + 95% TC Braid + Foil Shield, PVC Jacket, CMR

Technical Specifications

Product Overview

Suitable Applications:	Digital Video, 6 Gb/s UHDTV, HD-SDI 1080p

Construction Details

Series Type:	7

Conductor

Size	Stranding	Nom. Diameter	Material
16 AWG	Solid	0.051 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.225 in (5.72 mm)	White

Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage	Notes
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%	
2	Braid	Tinned Copper (TC)		95%	
3	Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	With Shorting Fold and Bonded to inside of jacket for easy preparation

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.320 in (8.13 mm)

Overall Cable Diameter (Nominal):	0.320 in (8.13 mm)

Electrical Characteristics

Return Loss (RL)

Frequency	Min. Return Loss
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB
4500 - 6000 MHz	15 dB

Attenuation

Frequency	Nom. Attenuation
1 MHz	0.17 dB/100ft
3.58 MHz	0.30 dB/100ft
5 MHz	0.35 dB/100ft
6 MHz	0.38 dB/100ft
7 MHz	0.40 dB/100ft
10 MHz	0.48 dB/100ft

12 MHz	0.52 dB/100ft
25 MHz	0.74 dB/100ft
55 MHz	1.08 dB/100ft
67.5 MHz	1.20 dB/100ft
71.5 MHz	1.24 dB/100ft
88.5 MHz	1.37 dB/100ft
100 MHz	1.46 dB/100ft
135 MHz	1.70 dB/100ft
143 MHz	1.75 dB/100ft
180 MHz	1.97 dB/100ft
270 MHz	2.43 dB/100ft
360 MHz	2.83 dB/100ft
540 MHz	3.60 dB/100ft
720 MHz	4.20 dB/100ft
750 MHz	4.30 dB/100ft
1000 MHz	5.00 dB/100ft
1500 MHz	6.20 dB/100ft
2000 MHz	7.40 dB/100ft
2250 MHz	7.80 dB/100ft
3000 MHz	9.20 dB/100ft
4500 MHz	11.7 dB/100ft
6000 MHz	13.77 dB/100ft

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
4.0 Ohm/1000ft	1.9 Ohm/1000ft (6.2 Ohm/km)	16.1 pF/ft (52.8 pF/m)	75 Ohm	84%

Voltage

UL Voltage Rating
300 V (CMR, CMG)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-20°C to +75°C

Bend Radius

Installation Min.
3.2 in (81 mm)

Max. Pull Tension:	111 lbs (50.3 kg)
Bulk Cable Weight:	55 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, UV Resistance, Aerial - Black only, When supported by messenger wire
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1666 Vertical Shaft
CPR Compliance:	CPR Euroclass: 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)

Product Notes

Notes:	Also available in multi-coax bundled version 2177A. Print legend includes sequential footage marks.

History

Update and Revision:	Revision Number: 0.502 Revision Date: 04-24-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
1794A 0101000	Black	Reel	1,000 ft	612825357582	C
1794A 010N1000	Black	Reel w/Small Barrel	1,000 ft		
1794A 0102500	Black	Reel	2,500 ft	612825438212	
1794A 0061000	Blue, Light	Reel	1,000 ft	612825358619	C
1794A 0011000	Brown	Reel	1,000 ft	612825357513	C
1794A 0081000	Gray	Reel	1,000 ft	612825357568	C
1794A N3U1000	Green, Mil	Reel	1,000 ft	612825357506	C
1794A 0031000	Orange	Reel	1,000 ft	612825357537	C
1794A 0021000	Red	Reel	1,000 ft	612825357520	C
1794A 0071000	Violet	Reel	1,000 ft	612825357551	C
1794A 0091000	White	Reel	1,000 ft	612825357575	C
1794A 0041000	Yellow	Reel	1,000 ft	612825357544	C

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