



Part Number: 7927A

Cat 6 E-Spline Center DataTuff®, (4 pr) 23 AWG Solid BC, PO/PVC, CMR

Product Description

Four Cat 6 23 AWG Bonded-Pair solid bare copper conductors, polyolefin insulation, E-Spline center member, PVC jacket.

Product Specifications

Technical Specifications

Suitable Applications:	Industrial Ethernet Cable, Harsh Environments, 600 MHz Enhanced Category 6, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, RJ-45 Compatible
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Construction and Dimensions

Conductor:

AWG	Stranding	Material	No. of Pairs
23	Solid	BC - Bare Copper	4

Total Number of Conductors:	8
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Insulation:

Material
PO - Polyolefin

Color Chart 1:

Number	Color
1	White/Green & Green
2	White/Orange & Orange
3	White/Blue & Blue
4	White/Brown & Brown

Cabling 1:

Filler
E-Spline Center Member

Outershield 1:

Material
Unshielded

Outerjacket 1:

Material	Nominal Diameter	Ripcord
Industrial Grade PVC - Polyvinyl Chloride	251 x .339 in	Yes

Electrical Characteristics

Conductor DCR:

Max. Conductor DCR	Max. DCR Unbalance
8.2 Ohm/1000ft	3 %

Capacitance:

Max. Capacitance Unbalance	Nom.Mutual Capacitance
65.6 pF/ft	15.5 pF/ft

Delay:

Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
538 @ 100MHz ns/100m	38 ns/100m	67 %

High Freq:

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. SRL (Structural Return Loss)	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	1.9 db/100m	82.3 dB	80.3 dB	80.5 dB	78.5 dB	73.8 dB	70.8 dB	20 dB	27 dB	100 ± 12 Ohm	
4 MHz	3.6 db/100m	73.3 dB	71.3 dB	69.7 dB	67.7 dB	61.8 dB	58.8 dB	23 dB	27 dB	100 ± 12 Ohm	
8 MHz	5.1 db/100m	68.8 dB	66.8 dB	63.7 dB	61.7 dB	55.7 dB	52.7 dB	24.5 dB	27 dB	100 ± 12 Ohm	
10 MHz	5.7 db/100m	67.3 dB	65.3 dB	61.6 dB	59.6 dB	53.8 dB	50.8 dB	25 dB	27 dB	100 ± 12 Ohm	

16 MHz	7.2 db/100m	64.3 dB	62.3 dB	57 dB	55 dB	49.7 dB	46.7 dB	25 dB	27 dB	100 ± 12 Ohm	
20 MHz	8.1 db/100m	62.8 dB	60.8 dB	54.7 dB	52.7 dB	47.8 dB	44.8 dB	25 dB	27 dB	100 ± 12 Ohm	
25 MHz	9.1 db/100m	61.3 dB	59.3 dB	52.3 dB	50.3 dB	45.8 dB	42.8 dB	25 dB	27 dB	100 ± 15 Ohm	
31.25 MHz	10.2 db/100m	59.9 dB	57.9 dB	49.7 dB	47.7 dB	43.9 dB	40.9 dB	25 dB	27 dB	100 ± 15 Ohm	
62.5 MHz	14.7 db/100m	55.4 dB	53.4 dB	40.7 dB	38.7 dB	37.9 dB	34.9 dB	25 dB	27 dB	100 ± 15 Ohm	
100 MHz	18.9 db/100m	52.3 dB	50.3 dB	33.4 dB	31.4 dB	33.8 dB	30.8 dB	25 dB	27 dB	100 ± 15 Ohm	100 ± 5 Ohm
155 MHz	23.9 db/100m	49.5 dB	47.5 dB	25.5 dB	23.5 dB	30 dB	27 dB	22.8 dB	24.7 dB	100 ± 15 Ohm	100 ± 5 Ohm
200 MHz	27.5 db/100m	47.8 dB	45.8 dB	20.3 dB	18.3 dB	27.8 dB	24.8 dB	21.7 dB	23.4 dB	100 ± 15 Ohm	100 ± 5 Ohm
250 MHz	31.2 db/100m	46.3 dB	44.3 dB	15.2 dB	13.2 dB	25.8 dB	22.8 dB	20.5 dB	22.2 dB	100 ± 20 Ohm	100 ± 5 Ohm
300 MHz	34.5 db/100m	43.2 dB	41.2 dB	10.6 dB	8.6 dB	24.3 dB	21.3 dB	20.2 dB	21.2 dB	100 ± 20 Ohm	100 ± 5 Ohm
310 MHz	35.2 db/100m	42.9 dB	40.9 dB	9.8 dB	7.8 dB	24 dB	21 dB	20.1 dB	21.1 dB	100 ± 20 Ohm	100 ± 5 Ohm
350 MHz	37.7 db/100m	42.2 dB	40.2 dB	6.5 dB	4.5 dB	22.9 dB	19.9 dB	19.8 dB	20.4 dB	100 ± 22 Ohm	100 ± 5 Ohm
400 MHz	40.6 db/100m	41.3 dB	39.3 dB	2.6 dB	0.6 dB	21.8 dB	18.8 dB	19.5 dB	19.7 dB	100 ± 22 Ohm	100 ± 5 Ohm
450 MHz	43.5 db/100m	40.5 dB	38.5 dB	2.1 dB	0.1 dB	20.7 dB	17.7 dB	18.9 dB	19.1 dB	100 ± 22 Ohm	100 ± 5 Ohm
460 MHz	44 db/100m	40.4 dB	38.4 dB	0 dB	0 dB	20.5 dB	17.5 dB	18.8 dB	19 dB	100 ± 22 Ohm	100 ± 5 Ohm
500 MHz	46.2 db/100m	39.8 dB	37.8 dB			19.8 dB	16.8 dB	18.4 dB	18.5 dB	100 ± 22 Ohm	100 ± 5 Ohm
550 MHz	48.8 db/100m	39.2 dB	37.2 dB			19 dB	16 dB	18 dB	18 dB	100 ± 22 Ohm	100 ± 5 Ohm
600 MHz	51.4 db/100m	38.6 dB	36.6 dB			18.2 dB	15.2 dB	17.6 dB	17.6 dB	100 ± 22 Ohm	100 ± 5 Ohm
1 MHz											
4 MHz											
8 MHz											
10 MHz											
16 MHz											
20 MHz											
25 MHz											
31.25 MHz											
62.5 MHz											
100 MHz											
155 MHz											
200											
250											
300											
310											

350												
400												
450												
460												
500												
550												
600												

Voltage:

UL Voltage Rating
300 V RMS

Use

Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes
Max Recommended Pulling Tension:	45 lbs

Safety

C(UL) Flammability:	FT4
UL Flammability:	UL1666 Riser

Temperature Range

Installation Temp Range:	-25°C To +75 °C
Operating Temp Range:	-40°C To +75°C

Mechanical Characteristics

Min Bend Radius/Minor Axis:	0.25 in
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Part Number

Plenum (Y/N):	No
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Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
CEC/C(UL) Specification:	CEC/C(UL) Specification
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)
NEC/(UL) Specification:	NEC/(UL) Specification
Other Specification:	Other Specification

UL AWM Style:	AWM Specification
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)

History

Notes:	Third party verified to TIA/EIA-568-B.2, Category 6. Operating temperature subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.
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Product Variants

Part Number	Color	Put-Up Type	Length
7927A 0101000	BLACK	Reel	1000 ft
7927A 0102000	BLACK	Reel	2000 ft

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