Part Number: 7940A



DataTuff® 6, 4 Bonded-Pr #23 Sol BC, PO Ins, PVC Jkt, CMX-Outdoor CMR

Request Sample

Product Description

Industrial Ethernet Cat 6, 4 Bonded-Pair 23AWG (Solid) Bare Copper, PO Insulation, PVC Outer Jacket, CMX-Outdoor CMR

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 250MHz Category 6

Physical Characteristics (Overall)

Conductor

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

Conductor Count:	8
Total Number of Pairs:	4
Conductor Size:	23 AWG

Insulation

Material	Nominal Wall Thickness
PO - Polyolefin	0.01 in

Bonded-Pair:	Yes

Color Chart

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

Outer Shield Material

Material
Unshielded

Outer Jacket Material

Material	Material Trade Name	Nominal Diameter	Nominal Wall Thickness	Ripcord	Separator Material
Industrial Grade PVC - Polyvinyl Chloride	Datatuff®	0.25 in	0.03 in	Yes	Foamed Polyolefin Tape.

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
8.2 Ohm/1000ft	5 %

Capacitance

Max. Capacitance Unbalance	Nom.Mutual Capacitance
330 pF/ft	15 pF/ft

Delay

Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
537 ns/100m	45 ns/100m	72 %

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]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	2 dB/100m	74.3 dB	72.3 dB	72.3 dB	70.3 dB	67.8 dB	64.8 dB	21 dB	100 ± 15 Ohm	100 ± 15 Ohm
4 MHz	3.8 dB/100m	65.3 dB	63.3 dB	61.5 dB	59.5 dB	55.8 dB	52.7 dB	24 dB	100 ± 15 Ohm	100 ± 15
8 MHz	5.3 dB/100m	60.8 dB	58.8 dB	55.4 dB	53.4 dB	49.7 dB	46.7 dB	25.5 dB	100 ± 15 Ohm	100 ± 15
10 MHz	6 dB/100m	59.3 dB	57.3 dB	53.3 dB	51.3 dB	47.8 dB	44.8 dB	26 dB	100 ± 15 Ohm	100 ± 15
16 MHz	7.6 dB/100m	56.2 dB	54.3 dB	48.7 dB	46.7 dB	43.7 dB	40.7 dB	26 dB	100 ± 15 Ohm	100 ± 15
20 MHz	8.5 dB/100m	54.8 dB	52.8 dB	46.3 dB	44.3 dB	41.8 dB	38.8 dB	26 dB	100 ± 15 Ohm	100 ± 15
25 MHz	9.5 dB/100m	53.3 dB	51.3 dB	43.8 dB	41.8 dB	39.8 dB	36.8 dB	25.3 dB	100 ± 15 Ohm	100 ± 15
31.25 MHz	10.7 dB/100m	51.9 dB	49.9 dB	41.2 dB	39.2 dB	37.9 dB	34.9 dB	24.6 dB	100 ± 15 Ohm	100 ± 15
62.5 MHz	15.4 dB/100m	47.4 dB	45.4 dB	32 dB	30 dB	31.9 dB	28.9 dB	22.5 dB	100 ± 15 Ohm	100 ± 15
100 MHz	19.8 dB/100m	44.3 dB	42.3 dB	24.5 dB	22.5 dB	27.8 dB	24.8 dB	21.1 dB	100 ± 15 Ohm	
155 MHz	25.2 dB/100m	41.5 dB	39.5 dB	16.3 dB	14.3 dB	23.9 dB	20.9 dB	19.8 dB	100 ± 22 Ohm	100 ± 15 Ohm
200 MHz	29 dB/100m	39.8 dB	37.8 dB	10.8 dB	8.8 dB	21.8 dB	18.8 dB	19 dB	100 ± 22 Ohm	100 ± 15 Ohm
250 MHz	32.8 dB/100m	38.3 dB	36.3 dB	5.5 dB	3.5 dB	19.8 dB	16.8 dB	18.3 dB	100 ± 32 Ohm	100 ± 15 Ohm

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temp Range:	-20°C To +75°C
UL Temp Rating:	60°C
Storage Temp Range:	-40°C To +75°C
Operating Temp Range:	-40°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	30 lbs/1000ft
Max Recommended Pulling Tension:	40 lbs
Min Bend Radius/Minor Axis:	2.5 in

Standards

NEC/(UL) Specification:	CMR, CMX-Outdoor, UL 444
CEC/C(UL) Specification:	CMR
ISO/IEC Compliance:	ISO/IEC 11801 Cat 6
CPR Euroclass:	Eca
Data Category:	Category 6
Telecommunications Standards:	TIA-568-C.2 Category 6
Third Party Performance Verification:	UL Verified Category 6

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	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):	2004-01-04
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes

Suitability - Burial:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	Yes
Suitability - Oil Resistance:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL1666 Riser
CSA Flammability:	FT4
ISO/IEC Flammability:	IEC 60332-1-2
IEEE Flammability:	1202
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	UPC	Length	Footnote
7940A 0101000	Black	612825191827	1,000 ft	C
7940A 0102000	Black	612825191834	2,000 ft	C
7940A 0061000	Blue	612825191803	1,000 ft	
7940A 0081000	Gray	612825191810	1,000 ft	
7940A 1NH1000	Teal	612825191841	1,000 ft	C

Footnote:	C - CRATE REEL PUT-UP.
Patent:	7977575

Product Notes

Notes:	Jacket sequentially marked at 2 ft. intervals.

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