



Product: [9880](#)

Thicknet 10BASE5, #12 BC, FPO, Duobond IV, PVC Jkt, CM

Product Description

IEEE 802.3 Ethernet Thicknet 10BASE5, DEC p/n 17-00451-00, 12 AWG solid .086" bare copper conductor, foam polyethylene insulation, Duobond IV® quad shield (100% coverage), PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	Thick Ethernet
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
12	Solid	BC - Bare Copper	0.086 in	1

Conductor Count:	1
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Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.243 in

Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		94%
Tape	3	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	4	Tinned Copper (TC)		90%

Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.405 in
	0.25 in

Weight:	0.25 lbs
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Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
1.42 Ohm/1000ft	1.52 Ohm/1000ft	1.52 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
26 pF/ft

Inductance

Nominal Inductance
0.065 µH/ft

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
50 Ohm	± 2 Ohm

Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
78 ns/100m	1.3 ns/ft	78%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)
1 MHz	0.19 dB/100ft
5 MHz	0.37 dB/100ft
10 MHz	0.52 dB/100ft
50 MHz	1.2 dB/100ft
100 MHz	1.7 dB/100ft
200 MHz	2.55 dB/100ft
400 MHz	3.9 dB/100ft
700 MHz	5.5 dB/100ft
900 MHz	6.5 dB/100ft
1000 MHz	6.9 dB/100ft
1500 MHz	8.5 dB/100ft
2000 MHz	10.1 dB/100ft
2500 MHz	11.5 dB/100ft
3000 MHz	13 dB/100ft

Voltage

UL Description	UL Voltage Rating
	300 V RMS
UL AWM 1478	30 V RMS

Electrical Characteristics Notes:	UL AWM 1478: 30 V RMS
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Temperature Range

UL Temp Rating:	60°C
Operating Temperature Range:	-40°C To +60°C

Mechanical Characteristics

Bulk Cable Weight:	122 lbs/1000ft
Max. Pull Tension:	255 lbs
Min. Bend Radius/Minor Axis:	4.25 in

Standards

Customer Reference Document:	DEC Part No. 17-00451-00
NEC/(UL) Compliance:	CL2, CM
CEC/C(UL) Compliance:	CM
UL AWM Style Compliance:	AWM 1478 (30 V 60°C)
CPR Euroclass:	Eca
IEEE Compliance:	IEEE 802.3 10Base5

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	89880

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
9880 004500	Yellow	Reel	500 ft	612825259961
9880 0041000	Yellow	Reel	1,000 ft	612825259947
9880 0041640	Yellow	Reel	1,640 ft	612825259954

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:	Ringband stripes every 2.5 meters to aid users in tap placement.
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History

Update and Revision:	Revision Number: 0.354 Revision Date: 05-05-2023
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