

Part Number: 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**

#### Insulation

| Material                  | Nominal Diameter |
|---------------------------|------------------|
| FPE - Foamed Polyethylene | 0.243 in         |

#### Outer Shield Material

| Type  | Layer | Material  | Material Trade Name | Coverage [%] |
|-------|-------|---|---------------------|--------------|
| Таре  | 1     | Bonded Aluminum Foil-Polyester Tape-Aluminum Foil | Bonded Duofoil®     | 100 %        |
| Braid | 2     | TC - Tinned Copper                                |                     | 94 %         |
| Tape  | 3     | Aluminum Foil-Polyester Tape-Aluminum Foil        | Duofoil®            | 100 %        |
| Braid | 4     | TC - Tinned Copper                                |                     | 90 %         |

#### **Outer Jacket Material**

| Mate          | rial         | Nominal Diameter |
|---------------|--------------|------------------|
| PVC - Polyvir | nyl Chloride | 0.405 in         |
|               |              | 0.25 in          |
| Weight:       |              | 0                |

### **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

Impedance

| Nominal Characteristic Impedance | Nominal Characteristic Tolerance |
|----------------------------------|----------------------------------|
| 50 Ohm                           | ± 2 Ohm                          |

## Delay

| N | Max. Delay Skew | Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---|-----------------|---------------|--|
| 7 | 78 ns/100m      | 1.3 ns/ft     | 78 %                                     |

## High Freq

| 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

| <b>UL Description</b> | UL Voltage Rating |
|-----------------------|-------------------|
|                       | 300 V RMS         |
| UL AWM 1478           | 30 V RMS          |

Electrical Characteristics Notes: UL AWM 1478: 30 V RMS

# **Temperature Range**

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

# **Mechanical Characteristics**

| Bulk Cable Weight:               | 122 lbs/1000ft |
|----------------------------------|----------------|
| Max Recommended Pulling Tension: | 255 lbs        |
| Min Bend Radius/Minor Axis:      | 4.25 in        |

## **Standards**

| Customer Part Number Reference Spec: | DEC Part No. 17-00451-00 |
|--------------------------------------|--------------------------|
| NEC/(UL) Specification:              | CL2, CM                  |
| CEC/C(UL) Specification:             | CM                       |
| UL AWM Style:                        | 1478 (30 V 60°C)         |
| CPR Euroclass:                       | Eca                      |
| IEEE Specification:                  | 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 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                           |
| MII Order #39 (China RoHS):           | Yes                           |

# Suitability

| Outstand the contract of the c | V   |  |
|--|-----|--|
| Suitability - Indoor:  | Yes |  |
|  |     |  |

#### Flammability, LS0H, Toxicity Testing

| UL Flammability: UL1685 UL Loading |
|------------------------------------|
|------------------------------------|

#### **Part Number**

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

#### Variants

| Item #       | Color  | Footnote |
|--------------|--------|----------|
| 9880 0041000 | YELLOW | С        |
| 9880 0041640 | YELLOW | С        |
| 9880 004500  | YELLOW | С        |

Footnote: C - CRATE REEL PUT-UP.

#### **Product Notes**

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

© 2018 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS(Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be instock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product tiself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.