



**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 |
|------------------------|----------------|

#### Construction Details

##### Conductor

| Element  | No. of Elements | Size   | Stranding | Nom. Diameter | Material         |
|----------|-----------------|--------|-----------|---------------|------------------|
| Coax(es) | 1               | 12 AWG | Solid     | 0.086 in      | BC - Bare Copper |

##### Insulation

| Element  | Material                 | Nom. Insulation Diameter | Color Code |
|----------|--------------------------|--------------------------|------------|
| Coax(es) | PE - Polyethylene (Foam) | 0.243 in (6.17 mm)       | White      |

##### Inner Shield

| Element  | Shield Type | Material                      | Coverage |
|----------|-------------|-------------------------------|----------|
| Coax(es) | Tape        | Tri-Laminate (Alum+Poly+Alum) | 100%     |
| Coax(es) | Braid       | Tinned Copper (TC)            | 95%      |

##### Outer Shield

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

##### Outer Jacket

| Material                 | Nom. Diameter      |
|--------------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.405 in (10.3 mm) |

#### Electrical Characteristics

##### Attenuation

| Frequency | Max. 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     |

|          |               |
|----------|---------------|
| 7000 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   |

#### Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR         | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. | Max. Delay Skew |
|--------------------|-------------------------------|---------------------------------|-------------------------------|------------------------|-----------------|
| 1.42 Ohm/1000ft    | 1.52 Ohm/1000ft (4.99 Ohm/km) | 26 pF/ft (85 pF/m)              | 50 Ohm                        | 78%                    | 78 ns/100m      |

#### Voltage

##### UL Voltage Rating

300 V RMS, 30 V RMS

Electrical Characteristics Notes: UL AWM 1478: 30 V RMS

#### Mechanical Characteristics

#### Temperature

| UL Temperature | Operating      |
|----------------|----------------|
| 60°C           | -40°C To +60°C |

#### Bend Radius

| Stationary Min.  | Installation Min. |
|------------------|-------------------|
| 4.05 in (103 mm) | 4.05 in (103 mm)  |

Max. Pull Tension: 255 lbs (116 kg)

Bulk Cable Weight: 122 lbs/1000ft

#### Standards and Compliance

|                                  |   |
|----------------------------------|---|
| Environmental Suitability:       | Indoor, Indoor  |
| Flammability / Reaction to Fire: | UL1685 UL Loading, IEC 60332-1-2  |
| CPR Compliance:                  | CPR Euroclass: Eca; CPR UKCA Class: Eca   |
| NEC / UL Compliance:             | Article 725, Article 800, CL2, CM   |
| AWM Compliance:                  | AWM 1478  |
| CEC / C(UL) Compliance:          | CM  |
| IEEE Compliance:                 | IEEE 802.3 10Base5  |
| European Directive Compliance:   | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), 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)   |
| Other Standard Compliance(s):    | DEC Part No. 17-00451-00  |
| Plenum Number:                   | 89880   |

#### Product Notes

Notes: Ringband stripes every 2.5 meters to aid users in tap placement. (1) # Elements@Conductor1:-In Stibo it was Blank and now changed to 1. (2) Size@Conductor1 :-In Stibo it was 12 now changed to 12AWG (3) Color@Color Chart1 01 :- In stibo it was Blank now Changed to White (4) Material@OuterShield1 1 - In stibo it is Tri-Laminate (Alum+Poly+Alum) But in BPCS (EAA+ Alum+ Poly+Alum) (5) Material@OuterShield1 3 - In stibo it is Tri-Laminate (Alum+Poly+Alum) But in BPCS (Diamond Pattern EAA+ Alum+ Poly+Alum + Mineral oil) (6) Cable Diameter (Nominal)- In Stibo it was Blank Now Changed to 0.405 in.

#### History

Update and Revision: Revision Number: 0.476 Revision Date: 04-29-2024

#### Part Numbers

#### Variants

| Item # | Color | Putup Type | Length | UPC | Footnote |
|--------|-------|------------|--------|-----|----------|
|--------|-------|------------|--------|-----|----------|

|              |        |      |          |              |   |
|--------------|--------|------|----------|--------------|---|
| 9880 004500  | Yellow | Reel | 500 ft   | 612825259961 | C |
| 9880 0041000 | Yellow | Reel | 1,000 ft | 612825259947 | C |
| 9880 0041640 | Yellow | Reel | 1,640 ft | 612825259954 | C |

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