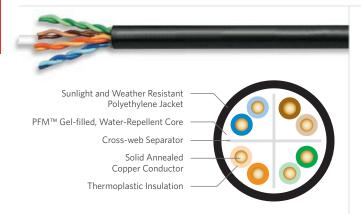
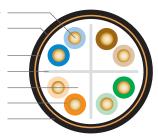
# **OSP Broadband Category 6**

BBD6, BBDN6 and BBDG6



Solid Annealed Copper Conductor Aluminum Tape Shield (BBDN6) or Copper-clad Steel Armor (BBDG6) Polyethylene Inner Jacket Cross-web Separator PFM Gel-filled, Water-Repellent Core Thermoplastic Insulation

Sunlight and Weather Resistant Polyethylene Outer Jacket



| SPECIFICATIONS                      |  |  |  |
|-------------------------------------|--|--|--|
| Pair Count                          | 4  |  |  |
| Conductor                           | Solid annealed copper  |  |  |
| AWG (mm)                            | 23 (0.57)  |  |  |
| Insulation                          | Polyolefin   |  |  |
| Separator                           | Polyolefin cross-web   |  |  |
| Shield/Armor                        | BBD6: Unshielded BBDN6: Electrically continuous 0.008 in (0.20 mm) polymer coated smooth aluminum tape, applied with an overlap BBDG6: Electrically continuous 0.005 in (0.13 mm corrugated copper-clad steel armor, applied with an overlap |  |  |
| Dry Water Block                     | BBDN6: SAP powder<br>BBDG6: SAP yarn   |  |  |
| Jacket                              | Black, sunlight and weather resistant polyethylene   |  |  |
| Characteristic Impedance (Ohms)     | 100 ± 15   |  |  |
| Nominal Velocity of Propagation (%) | 68   |  |  |
| Performance Compliance              | ANSI/TIA-568-C.2<br>ANSI/ICEA S-107-704-2006<br>Article 800, NEC (NFPA 70)<br>RoHS-compliant   |  |  |

#### PRODUCT DESCRIPTION

BBD6 is an Outside Plant (OSP) unshielded Broadband Category 6 cable. BBD6 has guaranteed transmission performance out to 250 MHz. The cable consists of a core of four balanced twisted pairs held in place by a cross-web separator and surrounded by a filling compound to prevent water ingress. The core is jacketed with a sunlight and abrasion resistant black polyethylene outer jacket. Shielded designs feature dry water block between the shield and the core jacket to prevent water ingress. All designs are suitable for buried applications.

### **APPLICATIONS**

- 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) IEEE 802.3af
- PoE+ IEEE 802.3at Type 1 and 2
- ATM and token ring
- BBDN6: Lashed aerial, underground conduit or low-risk direct burial
- BBDG6: Direct burial where additional mechanical protection is required

## **FEATURES**

## Transmission performance characterized to 500 MHz

- BBD6: Unshielded
- BBDN6: Aluminum tape shield
- BBDG6: Copper-clad steel armor
- Dry block between shield/armor and inner jacket
- PFM<sup>™</sup> gel-filled core construction
- OSP-grade black polyethylene jacket
- ColorTip™ circuit identification system

#### **BENEFITS**

- OSP rated cable provides connections for work area and extension of the LAN
- Small, robust design for unshielded applications
- Protection against EMI/RFI
- Protection against EMI/RFI and provides rodent resistance
- Prevents water ingress between shield in inner cable preventing damage to equipment
- · Prevents intrusion of moisture and easily wipes clean during installation
- Outside plant rated cable for years of reliable performance
- Easily identifiable conductor mates even in low-light environments



# **TECHNICAL GUIDELINE**

Special connectivity is required for these cable designs. Refer to the "OSP Broadband Installation Guidelines" on our site for more information: SuperiorEssex.com/TechTip.aspx

| NUMBERS AND PHYSICAL CHARACTERISTICS |              |                      |                             |                                |                    |  |
|--------------------------------------|--------------|----------------------|-----------------------------|--------------------------------|--------------------|--|
| Part Number                          | Product Code | Shield/Armor         | Nominal Diameter<br>in (mm) | Approx. Weight lbs/kft (kg/km) | Package            |  |
| 04-001-68                            | BBD6         | None                 | 0.30 (7.6)                  | 39 (58)                        | 1,000' Plywood ree |  |
| 04-002-68                            | BBD6         | None                 | 0.30 (7.6)                  | 39 (58)                        | 2,500' Plywood red |  |
| 04-003-68                            | BBD6         | None                 | 0.30 (7.6)                  | 39 (58)                        | 5,000' Plywood re  |  |
| 04-601-68                            | BBD6         | None                 | 0.30 (7.6)                  | 39 (58)                        | Cut to length      |  |
| 04-001-64                            | BBDN6        | Coated aluminum tape | 0.39 (9.8)                  | 72 (107)                       | 1,000' Plywood re  |  |
| 04-002-64                            | BBDN6        | Coated aluminum tape | 0.39 (9.8)                  | 72 (107)                       | 2,500' Plywood re  |  |
| 04-003-64                            | BBDN6        | Coated aluminum tape | 0.39 (9.8)                  | 72 (107)                       | 5,000' Plywood re  |  |
| 04-601-64                            | BBDN6        | Coated aluminum tape | 0.39 (9.8)                  | 72 (107)                       | Cut to length      |  |
| 04-001-65                            | BBDG6        | Copper-clad steel    | 0.39 (9.8)                  | 85 (127)                       | 1,000' Plywood re  |  |
| 04-002-65                            | BBDG6        | Copper-clad steel    | 0.39 (9.8)                  | 85 (127)                       | 2,500' Plywood re  |  |
| 04-003-65                            | BBDG6        | Copper-clad steel    | 0.39 (9.8)                  | 85 (127)                       | 5,000' Plywood re  |  |
| 04-601-65                            | BBDG6        | Copper-Clad Steel    | 0.39 (9.8)                  | 85 (127)                       | Cut to Length      |  |



