

**SCP PART#: CAT6A-BK**

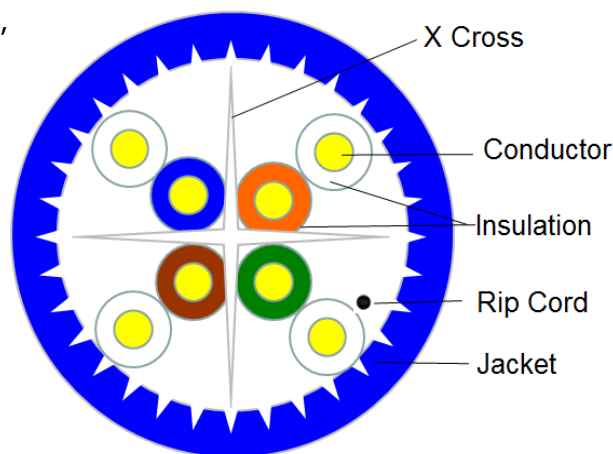
Rev04/20

**Description:**

CAT6A UTP- 10GBASE-T, 600 MHz 23AWG SOLID BC 4PR,  
UTP, ANSI/TIA 568.2-D, ISO/IEC 11801 CLASS Ea, UL CMR,  
PVC JKT- BLACK - 1000FT SPOOL

**Regulatory**

UL 444, ANSI/TIA 568.2-D and ISO/IEC 11801  
Type (UL) CMR or c(UL) FT4 Class Ea  
EU RoHS 2011/65 EU Compliant



**Application: Lan Cable**

**Construction Characteristics:**

|             |               |                                                          |
|-------------|---------------|----------------------------------------------------------|
| Conductor   | Material      | Solid Bare Copper                                        |
|             | Size          | 23AWG X 4P                                               |
|             | Construction  | 1/0.575+/-0.005mm                                        |
| Insulation  | Material      | HDPE                                                     |
|             | Min.Thickness | 0.20mm                                                   |
|             | AVG.Thickness | 0.21mm                                                   |
|             | Diameter      | 1.02+/-0.05mm                                            |
|             | Colors        | White/Blue<br>White/Orange<br>White/Green<br>White/Brown |
| Jacket      | Material      | PVC                                                      |
|             | Min.Thickness | 0.70mm                                                   |
|             | AVG.Thickness | 0.80mm                                                   |
|             | Diameter      | 6.8+/-0.20mm                                             |
|             | Rip Cord      | Nylon                                                    |
|             | Color         | Per request                                              |
| Bend radius |               | Min 20D/140mm                                            |

**Electrical & Physical Characteristics:**

|                                      |        |                  |                        |
|--------------------------------------|--------|------------------|------------------------|
| Operating Temperature Range          |        |                  | - 20°C + 75°C          |
| Conductor Resistance                 |        |                  | Max 72.2ohm/km at 20°C |
| Dielectric Strength                  |        |                  | Min AC1.5KV            |
| Spark Test                           |        |                  | 5.0KV                  |
| Insulation                           | Unaged | Tensile Strenght | 12.3Mpa                |
|                                      |        | Elongation       | 150%                   |
|                                      | Aged   | Tensile Strenght | 9.8Mpa(100°C 168h)     |
|                                      |        | Elongation       | 100%(100°C 168h)       |
| Jacket                               | Unaged | Tensile Strenght | 13.8 Mpa               |
|                                      |        | Elongation       | 100%                   |
|                                      | Aged   | Tensile Strenght | 11.7Mpa(100°C 168h)    |
|                                      |        | Elongation       | 50%(100°C 168h)        |
| Rated Voltage                        |        |                  | Max 300Volts           |
| DC Resisitance Unbalance             |        |                  | Max 5%                 |
| Pair-to-Ground Capacitance Unbalance |        |                  | Max 3300pF/km          |
| Characteristic Impedance             |        |                  | 100+/-15OHM            |
| Nominal Velocity of Propagation(%)   |        |                  | 67~69                  |
| Propagation Delay                    |        |                  | Max 536ns/100m         |
| Delay Skew                           |        |                  | Max 40ns/100m          |

**Marking:**

|                                                                                                                                                                                                                                                 |                      |                   |                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------|---------------------|
| STRUCTURED CABLE PRODUCTS --- CAT6A --- ENHANCED 10GBASE-T 600MHZ UTP ANSI/TIA 568.2-D<br>ISO/IEC 11801 CLASS EA E198134 SCP3 (UL) C(UL) CMR 4PR 23AWG SOL BC - PVC JKT FT4<br>75C EU RoHS EC ZONE/DEVICE A B C D E 0 1 2 3 4 5 6 7 8 9 ***FEET |                      |                   |                     |
| Approx.Wight(kg)                                                                                                                                                                                                                                | Approx.Dimension(mm) | Package           | Packages per pallet |
| 17.4KGS/38.36 LBS                                                                                                                                                                                                                               | 360X240X160          | 1000FT/305M Spool | 27/36               |

## Performance-1

| ITEM<br>Frequency | Attenuation Max<br>(dB/100m) |      | NEXT Min (dB) |      | PS NEXT Min (dB) |      | ACR Min (dB) |      |
|-------------------|------------------------------|------|---------------|------|------------------|------|--------------|------|
|                   | Standard                     | SCP  | Standard      | SCP  | Standard         | SCP  | Standard     | SCP  |
| 1                 | 2.1                          | 1.9  | 74.3          | 80.3 | 72.3             | 76.6 | 72.3         | 78.4 |
| 4                 | 3.8                          | 3.7  | 65.3          | 75.6 | 63.3             | 74.2 | 61.5         | 71.9 |
| 8                 | 5.3                          | 5.1  | 60.8          | 66   | 58.8             | 65.1 | 55.5         | 60.9 |
| 10                | 5.9                          | 5.8  | 59.3          | 67.6 | 57.3             | 65.9 | 53.3         | 61.8 |
| 16                | 7.5                          | 7.4  | 56.2          | 70.8 | 54.2             | 67.2 | 48.6         | 63.4 |
| 20                | 8.4                          | 8.2  | 54.8          | 71.9 | 52.8             | 69.1 | 46.3         | 63.7 |
| 25                | 9.4                          | 9.1  | 53.3          | 62.3 | 51.3             | 60.8 | 43.8         | 53.2 |
| 31.25             | 10.5                         | 9.9  | 51.9          | 68.7 | 49.9             | 67.1 | 41.2         | 58.8 |
| 62.5              | 15                           | 15   | 47.4          | 59.6 | 45.4             | 58.3 | 32           | 44.6 |
| 100               | 19.1                         | 18.8 | 44.3          | 60   | 42.3             | 58   | 24.5         | 41.2 |
| 200               | 27.6                         | 27.4 | 39.8          | 57.5 | 37.8             | 56   | 10.8         | 30.1 |
| 250               | 31.1                         | 29.4 | 38.3          | 55.8 | 36.3             | 54.1 | 5.5          | 26.4 |
| 300               | 34.3                         | 33.3 | 37.1          | 54.2 | 35.1             | 53.4 | 0.7          | 20.9 |
| 400               | 43                           | 38.6 | 35.3          | 53.8 | 33.3             | 52.1 | ---          | ---  |
| 500               | 45.3                         | 43.9 | 33.8          | 51   | 31.8             | 49.3 | ---          | ---  |

## Performance-2

| ITEM<br>Frequency | RL Min (dB) |      | ELFEXT Min (dB) |      | PS ELFEXT Min (dB) |      | PSACR Min (dB) |      |
|-------------------|-------------|------|-----------------|------|--------------------|------|----------------|------|
|                   | Standard    | SCP  | Standard        | SCP  | Standard           | SCP  | Standard       | SCP  |
| 1                 | 20          | 23.6 | 68              | 75.6 | 65                 | 73.3 | 70.3           | 74.7 |
| 4                 | 23          | 23.9 | 56              | 61.3 | 53                 | 60.1 | 59.5           | 70.5 |
| 8                 | 24.5        | 30   | 49.9            | 55.7 | 46.9               | 54.8 | 53.5           | 60   |
| 10                | 25          | 28.5 | 48              | 55.2 | 45                 | 53.2 | 51.3           | 60.1 |
| 16                | 25          | 28.2 | 43.9            | 49.7 | 40.9               | 48.1 | 46.6           | 59.8 |
| 20                | 25          | 27.8 | 42              | 48.1 | 39                 | 46.2 | 44.3           | 60.9 |
| 25                | 24.3        | 27.5 | 40              | 45.9 | 37                 | 45   | 41.8           | 51.7 |
| 31.25             | 23.6        | 24.9 | 38.1            | 42.7 | 35.1               | 41.7 | 39.2           | 57.2 |
| 62.5              | 21.5        | 24.1 | 32.1            | 39.4 | 29.1               | 37.4 | 30             | 43.3 |
| 100               | 20.1        | 23.5 | 28              | 35   | 25                 | 33.2 | 22.5           | 39.2 |
| 200               | 18          | 23.2 | 22              | 32.8 | 19                 | 30.2 | 8.8            | 28.6 |
| 250               | 17.3        | 21.5 | 20              | 30.7 | 17                 | 27.7 | 3.5            | 24.7 |
| 300               | 16.8        | 20.8 | 18.5            | 26.5 | 15.5               | 25.4 | ---            | ---  |
| 400               | 15.9        | 18.9 | 15.8            | 23.4 | 12.8               | 22.1 | ---            | ---  |
| 500               | 15.2        | 18.6 | 14              | 19.5 | 11                 | 18.7 | ---            | ---  |