

**SCP PART#: CAT6-OR**

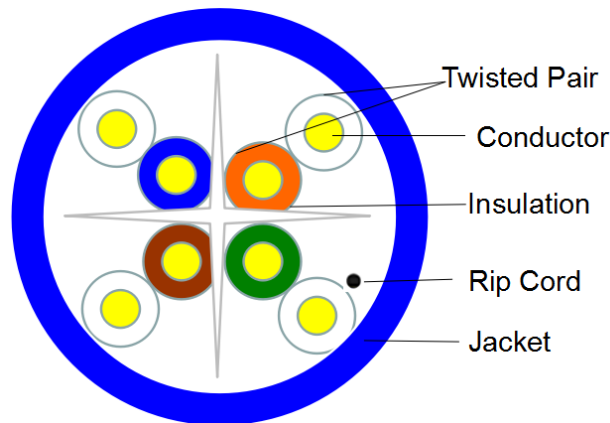
Rev03/20

**Description:**

CAT6 ENHANCED 550 MHz 23 AWG SOLID BC,  
4PR, UTP, ANSI/TIA 568.2-D, ISO/IEC 11801 CLASS E,  
UL CMR, PVC JKT - ORANGE  
1000FT/305M BOX

**Regulatory:**

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



**Application:**

Networking Lan Cable

**Construction Characteristics:**

|             |               |                     |
|-------------|---------------|---------------------|
| Conductor   | Material      | Solid Bare Copper   |
|             | Size          | 23AWG X 4P          |
|             | Construction  | 1/0.57+/-0.005mm    |
| Insulation  | Material      | HDPE                |
|             | Min.Thickness | 0.200mm             |
|             | AVG.Thickness | 0.220mm             |
|             | Diameter      | 1.03+/-0.01mm       |
|             | Colors        | Blue- White/Blue    |
|             |               | Orange-White/Orange |
|             |               | Green-White/Green   |
|             |               | Brown-White/Brown   |
| Jacket      | Material      | PVC                 |
|             | Min.Thickness | 0.54mm              |
|             | AVG.Thickness | 0.60mm              |
|             | Diameter      | 6.20+/-0.10mm       |
|             | Rip Cord      | Nylon               |
|             | Color         | Per request         |
| Bend Radius |               | Min 20D/125mm       |

**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       | 16.5Mpa             |
|                                      |        | Elongation             | 500%                |
|                                      | Aged   | Tensile Strenght       | 14.2Mpa(100°C 168h) |
|                                      |        | Elongation             | 250%(100°C 168h)    |
| Jacket                               | Unaged | Tensile Strenght       | 13.8Mpa             |
|                                      |        | 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 45ns/100m          |                     |

**Marking:**

STRUCTURED CABLE PRODUCTS --- CAT6 --- CAT6 ENHANCED 550MHz UTP ANSI/TIA 568.2-D ISO/IEC 11801 CLASS E  
E198134 SCP3 (UL) C(UL) CMR 4PR 23AWG SOL BC - PVC JKT FT4 75C EU RoHS EC  
ZONE/DEVICE A B C D E 0 1 2 3 4 5 6 7 8 9 \*\*\*M

**Packaging:**

|                   |                      |            |                     |
|-------------------|----------------------|------------|---------------------|
| Approx.Weight     | Approx.Dimension(mm) | Package    | Packages per pallet |
| 14.2kgs/31.305lbs | 400X290X400          | 1000FT/Box | 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                            | 1.9  | 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                | 6                            | 5.8  | 59.3          | 67.6 | 57.3             | 65.9 | 53.3         | 61.8 |
| 16                | 7.6                          | 7.4  | 56.2          | 70.8 | 54.2             | 67.2 | 48.6         | 63.4 |
| 20                | 8.5                          | 8.2  | 54.8          | 71.9 | 52.8             | 69.1 | 46.3         | 63.7 |
| 25                | 9.5                          | 9.1  | 53.3          | 62.3 | 51.3             | 60.8 | 43.8         | 53.2 |
| 31.25             | 10.7                         | 9.9  | 51.9          | 68.7 | 49.9             | 67.1 | 41.2         | 58.8 |
| 62.5              | 15.4                         | 15   | 47.4          | 59.6 | 45.4             | 58.3 | 32           | 44.6 |
| 100               | 19.8                         | 18.8 | 44.3          | 60   | 42.3             | 58   | 24.5         | 41.2 |
| 200               | 29                           | 27.4 | 39.8          | 57.5 | 37.8             | 56   | 10.8         | 30.1 |
| 250               | 32.8                         | 29.4 | 38.3          | 55.8 | 36.3             | 54.1 | 5.5          | 26.4 |
| 300               | 36.4                         | 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               | 48.9                         | 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 | 67.8            | 75.6 | 64.8               | 73.3 | 70.3           | 74.7 |
| 4                 | 23          | 23.9 | 55.8            | 61.3 | 52.8               | 60.1 | 59.5           | 70.5 |
| 8                 | 24.5        | 30   | 49.7            | 55.7 | 46.7               | 54.8 | 53.5           | 60   |
| 10                | 25          | 28.5 | 47.8            | 55.2 | 44.8               | 53.2 | 51.3           | 60.1 |
| 16                | 25          | 28.2 | 43.7            | 49.7 | 40.7               | 48.1 | 46.6           | 59.8 |
| 20                | 25          | 27.8 | 41.8            | 48.1 | 38.8               | 46.2 | 44.3           | 60.9 |
| 25                | 24.3        | 27.5 | 39.8            | 45.9 | 36.8               | 45   | 41.8           | 51.7 |
| 31.25             | 23.6        | 24.9 | 37.9            | 42.7 | 34.9               | 41.7 | 39.2           | 57.2 |
| 62.5              | 21.5        | 24.1 | 31.9            | 39.4 | 28.9               | 37.4 | 30             | 43.3 |
| 100               | 20.1        | 23.5 | 27.8            | 35   | 24.8               | 33.2 | 22.5           | 39.2 |
| 200               | 18          | 23.2 | 21.8            | 32.8 | 18.8               | 30.2 | 8.8            | 28.6 |
| 250               | 17.3        | 21.5 | 19.8            | 30.7 | 16.8               | 27.7 | 3.5            | 24.7 |
| 300               | 16.8        | 20.8 | 18.3            | 26.5 | 15.3               | 25.4 | ---            | ---  |
| 400               | 15.9        | 18.9 | 15.8            | 23.4 | 12.8               | 22.1 | ---            | ---  |
| 500               | 15.2        | 18.6 | 13.8            | 19.5 | 10.8               | 18.7 | ---            | ---  |