

1351A<br>Part Number: 1351A<br>Category 6 Nonbonded-Pair ScTP Cable

## Product Description

CAT6 ( 350 MHz ), 4-Pair, F/UTP-Foil Shielded, Riser-CMR, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Polyester Separator, Overall Beldfoil Shield, PVC Jacket

## Product Specifications

## Application

| Suitable Applications: | Networking Horizontal Cable, 1000Base-T (Gigabit Ethernet), 100Base-T (Fast Ethernet), 10Base-T (Ethernet), 100BaseVG, ANYLAN, 155ATM, 622ATM, ANSI.X3.263 FDDI TP-PMD, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Noisy Environments, 250 MHz Category 6 |
| :---: | :---: |

## Cabling1

## Cabling1, Filler:

## Patented Central X-spline

## Technical Specifications

## APAC Standard

| MII Order \#39 (China RoHS): | Yes |
| :--- | :--- |

## Applicable Patents

| Country: | US |
| :--- | :--- |
| Patent: | 7663061 |

## Bend Radius

| Min Bend Radius/Minor Axis: | 3 in |
| :--- | :--- |
| Min Bend Radius/Installation: | 3 in |


| Notes: | Jacket sequentially marked at 2 ft. intervals. Third party <br> Verified to ANSI/TIA-568-C.2, Category 6. Values above <br>  <br>  $\mathbf{3 5 0 \mathrm { MHz } \text { are for Engineering Information Only. }}$ |
| :--- | :--- |

## CCB-Sub-Part Number

| Plenum $(\mathrm{Y} / \mathrm{N})$ : | No |
| :--- | :--- |
| Plenum Number: | 1352 A |

## Contact Information

| PHONE_NUM: | $1-800-$ Belden1 |
| :--- | :--- |

## EMEA Standard

| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| :--- | :--- |

## Environmental Characteristics

| Operating Temp Range: | $-20^{\circ} \mathrm{C} \mathrm{To}+75^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Storage Temp Range: | $-20^{\circ} \mathrm{C} \mathrm{To}+75^{\circ} \mathrm{C}$ |
| Installation Temp Range: | $0^{\circ} \mathrm{C} \mathrm{To}+60^{\circ} \mathrm{C}$ |

## EU Directive

| EU CE Mark: | Yes |
| :--- | :--- |
| EU RoHS Compliance Date (yyyy-mm-dd): | $2007-05-24$ |

## Global Standard

| Telecommunications Standards: | ANSI/TIA/EIA 568 C.2 Category 6 |
| :--- | :--- |
| ISO/IEC Compliance: | 11801 ed 2.1 (2008) Class E |

## North American Standard

| CA Prop 65 (CJ for Wire \& Cable): | Yes |
| :--- | :--- |
| CEC/C(UL) Specification: | CMR |
| NEC/(UL) Specification: | CMR |

## Safety

| UL Flammability: | UL1666 Riser |
| :--- | :--- |
| C(UL) Flammability: | FT4 |
| CSA Flammability: | FT4 |

Use

| Max Recommended Pulling Tension: | 25 lbs |
| :--- | :--- |

## Conductor DCR:

| Max. Conductor DCR | Max. DCR Unbalance |
| :--- | :--- |
| $8.2 \mathrm{Ohm} / 100 \mathrm{~m}$ | $3 \%$ |

## Color Chart 1:

| Number | Color |
| :--- | :--- |
| 1 | White/Blue Stripe \& Blue |
| 2 | White/Orange Stripe \& Orange |
| 3 | White/Green Stripe \& Green |
| 4 | White/Brown Stripe \& Brown |

## Delay:

| Frequency [MHz] | Max. Delay | Max. Delay Skew | Nominal Velocity of <br> Propagation (VP) |
| :--- | :--- | :--- | :--- |
| 100 MHz | $537 \mathrm{~ns} / 100 \mathrm{~m}$ | $30 \mathrm{~ns} / 100 \mathrm{~m}$ | $68 \mathrm{~ns} / 100 \mathrm{~m}$ |

## Voltage:

UL Voltage Rating

```
300V RMS
```


## High Freq:

| Frequency [MHz] | Max. Insertion Loss (Attenuatio | Min. NEXT | Min. PSNEXT | Min. ACR | Min. PSACR | Min. ACRF (ELFEXT) | Min. PSACRF (PSELFEX | Min. RL (Return Loss) | Max./Min Input Impedan (unFittec) | Max./Min. Fitted Impedanc |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 MHz | $\begin{aligned} & 2 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 74.3 dB | 72.3 dB | 72.3 dB | 70.3 dB | 70 dB | 68 dB | 20 dB | $\begin{aligned} & 100 \pm 15 \\ & \mathrm{Ohm} \end{aligned}$ | $100 \pm 15$ <br> Ohm |
| 4 MHz | $\begin{aligned} & 3.8 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 65.3 dB | 63.3 dB | 61.5 dB | 59.5 dB | 58 dB | 56 dB | 23 dB | $\begin{aligned} & 100 \pm 15 \\ & \mathrm{Ohm} \end{aligned}$ | $\begin{aligned} & 100 \pm 15 \\ & \mathrm{Ohm} \end{aligned}$ |
| 8 MHz | $\begin{aligned} & 5.3 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 60.8 dB | 58.8 dB | 55.5 dB | 53.5 dB | 51.9 dB | 49.9 dB | 24.5 dB | $\begin{aligned} & 100 \pm 15 \\ & \mathrm{Ohm} \end{aligned}$ | $100 \pm 15$ <br> Ohm |


| 10 MHz | 6 db/100m | 59.3 dB | 57.3 dB | 53.3 dB | 51.3 dB | 50 dB | 48 dB | 25 dB | $100 \pm 15$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 MHz | $\begin{aligned} & 7.6 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 56.2 dB | 54.3 dB | 48.6 dB | 46.6 dB | 45.9 dB | 43.9 dB | 25 dB | $100 \pm 15$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| 20 MHz | $\begin{aligned} & 8.5 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 54.8 dB | 52.8 dB | 46.3 dB | 44.3 dB | 44 dB | 42 dB | 25 dB | $100 \pm 15$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| 25 MHz | $\begin{aligned} & 9.5 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 53.3 dB | 51.3 dB | 43.8 dB | 41.8 dB | 42 dB | 40 dB | 24.3 dB | $100 \pm 15$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| $\begin{aligned} & 31.25 \\ & \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & 10.7 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 51.9 dB | 49.9 dB | 41.2 dB | 39.2 dB | 40.1 dB | 38.1 dB | 23.6 dB | $100 \pm 15$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| $\begin{aligned} & 62.5 \\ & \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & 15.4 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 47.4 dB | 45.4 dB | 32 dB | 30 dB | 34.1 dB | 32.1 dB | 21.5 dB | $100 \pm 15$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| 100 MHz | $\begin{aligned} & 19.8 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 44.3 dB | 42.3 dB | 24.5 dB | 22.5 dB | 30 dB | 28 dB | 20.1 dB | $100 \pm 15$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| 155 MHz | $\begin{aligned} & 25.2 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 41.5 dB | 39.5 dB | 16.2 dB | 14.2 dB | 26.2 dB | 24.2 dB | 18.8 dB | $100 \pm 22$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| 200 MHz | $\begin{aligned} & 29 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 39.8 dB | 37.8 dB | 10.8 dB | 8.8 dB | 24 dB | 22 dB | 18 dB | $100 \pm 22$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| 250 MHz | $\begin{aligned} & 32.8 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 38.3 dB | 36.3 dB | 5.5 dB | 3.5 dB | 22 dB | 20 dB | 17.3 dB | $100 \pm 32$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| 300 MHz | $\begin{aligned} & 36.4 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 37.1 dB | 35.1 dB | 0.7 dB |  | 20.5 dB | 18.5 dB | 16.8 dB | $100 \pm 32$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| 350 MHz | $\begin{aligned} & 39.8 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 36.1 dB | 34.1 dB |  |  | 19.1 dB | 17.1 dB | 16.3 dB | $100 \pm 32$ <br> Ohm | $100 \pm 15$ <br> Ohm |
| 400 MHz | $\begin{aligned} & 43 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 35.3 dB | 33.3 dB |  |  | 18 dB | 16 dB | 16 dB |  |  |
| 500 MHz | $\begin{aligned} & 48.9 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 33.8 dB | 31.8 dB |  |  | 16 dB | 14 dB | 15.2 dB |  |  |
| 650 MHz | $\begin{aligned} & 57.2 \\ & \mathrm{db} / 100 \mathrm{~m} \end{aligned}$ | 32.1 dB | 30.1 dB |  |  |  |  | 14.4 dB |  |  |

## Capacitance:

| Max. Capacitance Unbalanced | Nominal Mutual Capacitance |
| :--- | :--- |
| $66 \mathrm{pF} / \mathrm{m}$ | $14 \mathrm{pF} / \mathrm{ft}$ |

## Insulation:

## Material

PO - Polyolefin

Outerjacket 1:

|  | Nominal Diameter | Ripcord | Separator Material |
| :--- | :--- | :--- | :--- |
| PVC - Polyvinyl Chloride | 0.29 mm | Yes | Polyester Tape |

## Conductor:

| AWG | Stranding | Material | No. of Pairs |
| :--- | :--- | :--- | :--- |
| 23 | Solid | BC - Bare Copper | 4 |

## Outershield 1:

| Type | Material | Material Trade Name | Coverage | Drainwire Material | Drainwire AWG | Drainwire ConstructionNXD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tape | Aluminum Foil-Polyester Tape | Beldfoil ${ }^{\text {® }}$ | 100 \% | TC - Tinned Copper | 24 | Solid mm |

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