



Part Number: 1583A

CAT5e Horizontal, 4pr, UTP, PVC Jkt, CMR

Product Description

CAT5e (200MHz), 4-Pair, U/UTP-unshielded, Riser-CMR, Premise Horizontal cable, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, PVC jacket.

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Environmental Space: | Riser |
| Suitable Applications: | Horizontal, 1000BaseT, Gigabit Ethernet, 100BaseTX, Fast Ethernet, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Video, RS-422 |

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Pairs |
|-----|-----------|------------------|--------------|
| 24 | Solid | BC - Bare Copper | 4 |

| | |
|-----------------------------|---|
| Total Number of Conductors: | 8 |
|-----------------------------|---|

Insulation

| Material |
|-----------------|
| PO - Polyolefin |

Color Chart

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

Outer Shield Material

| Material |
|----------|
| N/A |

Outer Jacket Material

| Material | Nominal Diameter | Ripcord |
|--------------------------|------------------|---------|
| PVC - Polyvinyl Chloride | 0.190 in | Yes |

Electrical Characteristics

Capacitance

| Max. Capacitance Unbalance | Nom.Mutual Capacitance |
|----------------------------|------------------------|
| 330 pF/100m | 15 pF/ft |

| | |
|------------|------------------|
| Shielding: | UTP - Unshielded |
|------------|------------------|

Construction and Dimensions

| | |
|------------------------|---|
| Total Number of Pairs: | 4 |
|------------------------|---|

Conductor DCR

| Max. Conductor DCR | Max. DCR Unbalance |
|--------------------|--------------------|
| 9.38 Ohm/100m | 5 % |

Delay

| Max. Delay | Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|-------------------------|-----------------|--|
| @ 100 MHz 537.6 ns/100m | 45 ns/100m | 70 % |

High Freq

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. ACR [dB] | Min. PSACR [dB] | Min. ACRF (ELFEXT) [dB] | Min. PSACRF (PSELFEXT) [dB] | Min. RL (Return Loss) [dB] | Max./Min. Input Impedance (unFitted) | Max./Min. Fitted Impedance |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|-------------------------|-----------------------------|----------------------------|--------------------------------------|----------------------------|
| 1 MHz | 2.0 dB/100m | 65.3 dB | 62.3 dB | 63.3 dB | 60.3 dB | 63.8 dB | 60.8 dB | 20.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 4 MHz | 4.1 dB/100m | 56.3 dB | 53.3 dB | 52.2 dB | 49.2 dB | 51.8 dB | 48.8 dB | 23.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 8 MHz | 5.8 dB/100m | 51.8 dB | 48.8 dB | 46.0 dB | 43.0 dB | 45.7 dB | 42.7 dB | 24.5 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 10 MHz | 6.5 dB/100m | 50.3 dB | 47.3 dB | 43.8 dB | 40.8 dB | 43.8 dB | 40.8 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 16 MHz | 8.2 dB/100m | 47.2 dB | 44.2 dB | 39.0 dB | 36.0 dB | 39.7 dB | 36.7 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 20 MHz | 9.3 dB/100m | 45.8 dB | 42.8 dB | 36.5 dB | 33.5 dB | 37.8 dB | 34.8 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 25 MHz | 10.4 dB/100m | 44.3 dB | 41.3 dB | 33.9 dB | 30.9 dB | 35.8 dB | 32.8 dB | 24.3 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 31.25 MHz | 11.7 dB/100m | 42.9 dB | 39.9 dB | 31.2 dB | 28.2 dB | 33.9 dB | 30.9 dB | 23.6 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 62.5 MHz | 17.0 dB/100m | 38.4 dB | 35.4 dB | 21.4 dB | 18.4 dB | 27.9 dB | 24.9 dB | 21.5 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 100 MHz | 22.0 dB/100m | 35.3 dB | 32.3 dB | 13.3 dB | 10.3 dB | 23.8 dB | 20.8 dB | 20.1 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 155 MHz | 28.1 dB/100m | 32.4 dB | 29.4 dB | 4.4 dB | 1.4 dB | 20.0 dB | 17.0 dB | 18.8 dB | | |
| 200 MHz | 32.4 dB/100m | 30.8 dB | 27.8 dB | | | 17.8 dB | 14.8 dB | 18.0 dB | | |

Voltage

| UL Voltage Rating |
|-------------------|
| 300V RMS |

Applicable Standards & Environmental Programs

| | |
|--|---|
| CEC/C(UL) Specification: | CMR |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | Yes |
| Third Party Performance Verification: | Category 5e |
| EU CE Mark: | Yes |
| EU REACH SVHC Compliance (yyyy-mm-dd): | 2017-07-10 |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01 |
| CPR Euroclass: | Eca |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |
| Telecommunications Standards: | ANSI/TIA-568-C.2 Category 5e |
| Patent: | http://www.belden.com/p |

Standards

| | |
|---------------------|--|
| ISO/IEC Compliance: | 11801 ed 2.2 (2011) Class D |
| ANSI/TIA Category: | Category 5e |
| ANSI Compliance: | S-90-661-2012 Category 5e, ANSI/NEMA WC-63.1 Category 5e |

| | |
|-------------------------|---|
| IEEE Specification: | POE per 802.3af & POE+ per 802.3at-2009 |
| NEC Articles: | 800 |
| NEC/(UL) Specification: | CMR |

Flame Test

| | |
|-----------------------|---------------|
| C(UL) Flammability: | FT4 |
| ISO/IEC Flammability: | 60332-1 |
| UL Flammability: | UL 1666 Riser |

Safety

| | |
|--------------------|-----------|
| UL Voltage Rating: | 300 V RMS |
|--------------------|-----------|

Suitability

| | |
|------------------------------------|-----|
| Suitability - Aerial: | No |
| Suitability - Burial: | No |
| Suitability - Hazardous Locations: | No |
| Suitability - Indoor: | Yes |
| Suitability - Non-Halogenated: | No |
| Suitability - Oil Resistance: | No |
| Suitability - Outdoor: | No |
| Suitability - Sunlight Resistance: | No |

Mechanical Characteristics

| | |
|----------------------------------|----------------|
| Storage Temp Range: | -20°C To +75°C |
| Installation Temp Range: | 0°C To +50°C |
| Operating Temp Range: | -20°C To +75°C |
| Bulk Cable Weight: | 18(lbs/1000ft) |
| Max Recommended Pulling Tension: | 25(lbs) |
| Min Bend Radius/Minor Axis: | 1.0(in) |
| Min Bend Radius/Installation: | 2.0(in) |

Temperature Range

| | |
|-----------------|------|
| UL Temp Rating: | 75°C |
|-----------------|------|

Plenum/Non-Plenum

| | |
|----------------|-------|
| Plenum (Y/N): | No |
| Plenum Number: | 1585A |

History

Variants

| Item # | Color |
|----------------|-------|
| 1583A 0101000 | BLACK |
| 1583A 010U1000 | BLACK |
| 1583A 0061000 | BLUE |
| 1583A 0061640 | BLUE |
| 1583A 0063000 | BLUE |
| 1583A 006U1000 | BLUE |
| 1583A 0081000 | GRAY |
| 1583A 0081640 | GRAY |
| 1583A 0083000 | GRAY |
| 1583A 008U1000 | GRAY |
| 1583A.00305 | Gray |
| 1583A.00U305 | Gray |
| 1583A 0051000 | GREEN |

| | |
|----------------|--------|
| 1583A 005U1000 | GREEN |
| 1583A 0031000 | ORANGE |
| 1583A 003U1000 | ORANGE |
| 1583A 0121000 | Pink |
| 1583A 012U1000 | Pink |
| 1583A 002U1000 | RED |
| 1583A 0021000 | RED |
| 1583A 0091000 | WHITE |
| 1583A 0093000 | WHITE |
| 1583A 009U1000 | WHITE |
| 1583A 0041000 | YELLOW |
| 1583A 004U1000 | YELLOW |

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