

Product: <u>1318SB</u> ☑



Upjacketed Category 5e, #24-4pr, LSZH Jacket, CMG-LS, Shipboard ABS Type Approved

Product Description

24 AWG solid bare copper conductors, polyolefin insulation, rip cord, see color code chart (below), LSZH jacket. Descending footage marked every two feet.

Technical Drawing



Technical Specifications

Product Overview

Suitable Applications: Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 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 |
| Condu | Conductor Count: 8 | | 8 |
| Total I | Total Number of Pairs: | | 4 |

Insulation

| Material | |
|-----------------|-----|
| PO - Polyolefin | |
| Bonded-Pair: | N/A |

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

Inner Jacket

| Material | Nominal Diameter | Ripcord |
|-------------------|------------------|---------|
| PE - Polyethylene | 0.255 in | Yes |

Outer Shield



Outer Jacket

| Material | Nominal Diameter | Ripcord |
|---|------------------|---------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 0.308 in | No |

Electrical Characteristics

Conductor DCR

| Max. Conductor DCR | Max. DCR Unbalance |
|--------------------|--------------------|
| 93.8 Ohm/km | 3 % |

Capacitance

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

Delay

| Frequency [MHz] | Max. Delay | Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|-----------------|-------------|-----------------|--|
| 100 MHz | 538 ns/100m | 45 ns/100m | 70% |

High Frequency

| 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] | Min. SRL (Structural Return Loss) | Max./Min. Input Impedance (unFitted) | Max./Min. Fitted Impedance |
|--------------------|--------------------------------------|----------------------|------------------------|---------------------|-----------------------|----------------------------|--------------------------------|----------------------------------|---|--|-------------------------------|
| 1 MHz | 2 dB/100m | 65.3 dB | 62.3 dB | 63 dB | 60.3 dB | 63.8 dB | 60.8 dB | 20 dB | 23 dB | 100 ± 15 | 100 ± 15 |
| 4 MHz | 4.1 dB/100m | 56.3 dB | 53.3 dB | 51 dB | 49.2 dB | 51.7 dB | 48.7 dB | 23 dB | 23 dB | 100 ± 15 | 100 ± 15 |
| 8 MHz | 5.8 dB/100m | 51.8 dB | 48.8 dB | 46 dB | 43 dB | 45.7 dB | 42.7 dB | 24.5 dB | 24.5 dB | 100 ± 15 | 100 ± 15 |
| 10 MHz | 6.5 dB/100m | 50.3 dB | 47.3 dB | 43 dB | 40.8 dB | 43.8 dB | 40.8 dB | 25 dB | 25 dB | 100 ± 15 | 100 ± 15 |
| 16 MHz | 8.2 dB/100m | 47.3 dB | 44.3 dB | 39 dB | 36 dB | 39.7 dB | 36.7 dB | 25 dB | 25 dB | 100 ± 15 | 100 ± 15 |
| 20 MHz | 9.3 dB/100m | 45.8 dB | 42.8 dB | 36.5 dB | 33.5 dB | 37.7 dB | 34.7 dB | 25 dB | 25 dB | 100 ± 15 | 100 ± 15 |
| 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 | 24.3 dB | 100 ± 15 | 100 ± 15 |
| 31.25 MHz | 11.7 dB/100m | 42.9 dB | 39.9 dB | 31 dB | 28.2 dB | 33.9 dB | 30.9 dB | 23.6 dB | 23.6 dB | 100 ± 15 | 100 ± 15 |
| 62.5 MHz | 17 dB/100m | 38.4 dB | 35.4 dB | 22 dB | 19 dB | 27.8 dB | 24.9 dB | 21.5 dB | 21.5 dB | 100 ± 15 | 100 ± 15 |
| 100 MHz | 22 dB/100m | 35.3 dB | 32.3 dB | 14 dB | 10.3 dB | 23.8 dB | 20.8 dB | 20.1 dB | 20.1 dB | 100 ± 15 | 100 ± 15 |
| 155 MHz | 28.1 dB/100m | 32.5 dB | 29.5 dB | 4.4 dB | 1.4 dB | 19.9 dB | 16.9 dB | 15.8 dB | | 100 ± 25 | 100 ± 15 |
| 200 MHz | 32 dB/100m | 30.8 dB | 27.8 dB | 4 dB | 1 dB | 17.7 dB | 14.7 dB | 15 dB | | 100 ± 25 | 100 ± 15 |

Voltage

UL Voltage Rating 300 V RMS

Temperature Range

| UL Temp Rating: | 60°C |
|------------------------------|----------------|
| Storage Temperature Range: | -30°C To +60°C |
| Operating Temperature Range: | -30°C To +60°C |

Mechanical Characteristics

| Bulk Cable Weight: | 44 lbs/1000ft |
|------------------------------|---------------|
| Max. Pull Tension: | 35 lbs |
| Min. Bend Radius/Minor Axis: | 3 in |

Standards

| NEC/(UL) Compliance: | CMG-LS |
|-----------------------|-------------------|
| CEC/C(UL) Compliance: | CMG-ST1 |
| CPR Euroclass: | Eca |
| IEEE Compliance: | Std. 45 clause 23 |

Applicable Environmental and Other Programs

| Environmental Space: | Indoor/Outdoor - Euroclass Eca |
|--|--------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2011/65/EU (RoHS 2): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| MII Order #39 (China RoHS): | Yes |

Suitability

| Suitability - Indoor: | Yes |
|------------------------------------|-----|
| Suitability - Outdoor: | Yes |
| Suitability - Sunlight Resistance: | Yes |

Flammability, LS0H, Toxicity Testing

| UL Flammability: | UL1685 FT4 Loading, Limited Smoke |
|--------------------|-----------------------------------|
| IEC Flammability: | IEC 60332-1-2, IEC 60332-3-22 |
| IEEE Flammability: | 1202 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

|--|

Related Part Numbers

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|----------------|-------|-------------|----------|--------------|
| 1318SB 0101000 | Black | Reel | 1,000 ft | 612825111818 |
| ootnote: | | | C - CI | RATE REEL PU |

Product Notes

| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. RJ-45 Compatible. Jacket marked with descending footage at 2 ft. intervals. |
|--------|--|
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History

| Update and Revision: | Revision Number: 0.498 Revision Date: 04-29-2024 |
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