



Part Number: 7936A

Cat 5e LSZH MSHA DataTuff®, (4 pr) 24 AWG Solid BC, PO/LSZH, Foil Shld, CM

Product Description

Four Cat 5e 24 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, overall Beldfoil® shield (100% coverage), low smoke zero halogen jacket.

Product Specifications

Technical Specifications

Construction and Dimensions

Conductor:

| AWG | Stranding | Material | No. of Pairs |
|------------------------------------|-----------|------------------|--------------|
| 24 | Solid | BC - Bare Copper | 4 |
| Total Number of Conductors: | | | 8 |

Insulation:

| Material | Nominal Wall Thickness |
|-----------------|------------------------|
| PO - Polyolefin | 0.01 in |

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 |

Outershield 1:

| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|------|------------------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | Aluminum Foil-Polyester Tape | Beldfoil® | 100 % | TC - Tinned Copper | 24 | 7x32 mm |

Outerjacket 1:

| Material | Nominal Diameter | Ripcord |
|-------------------------------|------------------|---------|
| LSZH - Low Smoke Zero Halogen | 0.265 in | No |

Electrical Characteristics**Conductor DCR:**

| Max. Conductor DCR | Max. DCR Unbalance |
|--------------------|--------------------|
| 9.38 Ohm/1000ft | 3 % |

Capacitance:

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

Delay:

| Max. Delay | Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|----------------------|-----------------|--|
| 538 @ 100MHz 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] | 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 dB | 63.8 dB | 60.8 dB | 20 dB | 23 dB | 100 ± 15 Ohm | |
| 4 MHz | 4.1 db/100m | 56.3 dB | 53.3 dB | 51 dB | 49 dB | 51.7 dB | 48.7 dB | 23 dB | 23 dB | 100 ± 15 Ohm | |
| 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 Ohm | |
| 10 MHz | 6.5 db/100m | 50.3 dB | 47.3 dB | 43 dB | 41 dB | 43.8 dB | 40.8 dB | 25 dB | 25 dB | 100 ± 15 Ohm | |
| 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 Ohm | |
| 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 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 | 24.3 dB | 100 ± 15 Ohm | |
| 31.25 MHz | 11.7 db/100m | 42.9 dB | 39.9 dB | 31 dB | 28 dB | 33.9 dB | 30.9 dB | 23.6 dB | 23.6 dB | 100 ± 15 Ohm | |
| 62.5 MHz | 17 db/100m | 38.4 dB | 35.4 dB | 22 dB | 19 dB | 27.8 dB | 24.8 dB | 21.5 dB | 21.5 dB | 100 ± 15 Ohm | |
| 100 MHz | 22 db/100m | 35.3 dB | 32.3 dB | 14 dB | 11 dB | 23.8 dB | 20.8 dB | 20.1 dB | 20.1 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 200 MHz | 32.4 db/100m | | 27.8 dB | | 1 dB | | 14.7 dB | | 15 dB | 100 ± 25 Ohm | |
| 1 MHz | | | | | | | | | | | |
| 4 MHz | | | | | | | | | | | |
| 8 MHz | | | | | | | | | | | |
| 10 MHz | | | | | | | | | | | |
| 16 MHz | | | | | | | | | | | |
| 20 MHz | | | | | | | | | | | |
| 25 MHz | | | | | | | | | | | |
| 31.25 MHz | | | | | | | | | | | |
| 62.5 MHz | | | | | | | | | | | |
| 100 MHz | | | | | | | | | | | |
| 200 MHz | | | | | | | | | | | |

Voltage:

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

Use

| | |
|------------------------------------|--------|
| Suitability - Oil Resistance: | No |
| Suitability - Outdoor: | Yes |
| Suitability - Sunlight Resistance: | Yes |
| Max Recommended Pulling Tension: | 40 lbs |

Safety

| | |
|-------------------|-------------------|
| CSA Flammability: | FT4 |
| UL Flammability: | UL1685 UL Loading |

Temperature Range

| | |
|--------------------------|-----------------|
| Installation Temp Range: | +5°C To +75 °C |
| Operating Temp Range: | -10°C To +75°C |
| Storage Temp Range: | -10°C To +75 °C |

Mechanical Characteristics

| | |
|-----------------------------|--------|
| Min Bend Radius/Minor Axis: | 0.5 in |
|-----------------------------|--------|

Part Number

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Standards

| | |
|-----------------------------------|----------------------------------|
| ISO/IEC Compliance: | Other Standards |
| Telecommunications Standards: | Telecommunications Standards |
| CA Prop 65 (CJ for Wire & Cable): | CA Prop 65 (CJ for Wire & Cable) |
| CEC/C(UL) Specification: | CEC/C(UL) Specification |
| MII Order #39 (China RoHS): | MII Order #39 (China RoHS) |
| NEC/(UL) Specification: | NEC/(UL) Specification |
| Other Specification: | Other Specification |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |

History

| | |
|--------|--|
| Notes: | US Patent #'s 5,606,151; 5,734,126. Operating temperatures are subject to length de-rating. Cable passes -10C Cold Bend per UL 1581. |
|--------|--|

Product Variants

| Part Number | Color | Put-Up Type | Length |
|---------------|-------|-------------|---------|
| 7936A 0101000 | BLACK | Reel | 1000 ft |
| 7936A 0102000 | BLACK | Reel | 2000 ft |

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