

CAT5E 24AWG/4PAIR CMP 350MHz F/UTP SHIELDED

PART NO. 5ESHDCMPBX

Drain Wire

Used to ease termination of the cable shield for crimping or soldering



DESCRIPTION

- 24 AWG 4Pair F/UTP Category 5E cable tested to 350 MHz. Aluminum Mylar Foil Shield. Available in Pull Box

FEATURES AND BENEFITS

- Structured cabling for Ethernet Networks
- Foil shield reduces electromagnetic interference (EMI) for optimal performance
- Performance guaranteed to 350 MHz
- Sequential footage markings
- Verified by third-party for guaranteed performance

APPLICATIONS

- IEEE 802.3 1000Base-T, 100Base-TX, 10Base-T, PoE, PoE+
- CDDI, Token Ring, ATM
- Broadband and Baseband Analog Video

STANDARD COMPLIANCES

- ANSI/TIA 568-C.2
- ANSI/TIA 862 (Building Automation)
- ISO/IEC 11801 Ed. 2.0 (Class EI)
- ICEA 8-102-700 (Category 6 or 5E)
- REACH Compliant
- CPR Compliant (Fully Comply to 305/2011 & EN 50575:2014-09)
- RoHS Compliant Directive 2002/95/EG

PHYSICAL PROPERTIES

| | | |
|----------------------|-------------------------------|-----------------|
| Conductor | Material | Copper |
| | Nominal Outside Diameter (mm) | 0.50 |
| Insulation | Material | FEP |
| | Diameter (± 0.05mm) | 0.90 |
| Screen Material | | Al-Foil |
| Construction | | Shielded/Plenum |
| Jacket | Material | FR-PVC |
| | Average Thickness (mm) | 0.55 |
| | Minimum Point Thickness (mm) | 0.50 |
| | Outside Diameter (±0.2mm) | 5.9 |
| Rip Cord: | | 250D Nylon |
| Drain Wire: | | 0.4 TC |
| Packing | Length | 1000ft/Pull Box |
| | Weight | 25 lbs |
| Voltage Rating (Max) | | 300V |
| Flame Test Method | | CMP |



ELECTRICAL CHARACTERISTICS

| | | |
|--|------------------------|----------------|
| 1.0 - 250.0MHz characteristic impedance (ohms) | | 100±15 |
| 250-650.0MHz Delay Skew (ns/100m) | | 45 |
| Pair-to-Ground Capacitance Unbalance (Pf/100m) | | 53 |
| Max. Conductor DC Resistance Unbalance (%) | | 95 |
| Max. Resistance Unbalance (%) | | 3 |
| Max Mutual Capacitance | | 330 |
| Max DC Loop Resistance | | 25 |
| Min DC Insulation Resistance | | - |
| Max Propagation Delay Skew | | 45 |
| Before Aging | Tensile Strength (Mpa) | ≥13.8 |
| | Elongation (%) | ≥300 |
| After Aging | Tensile Strength (Mpa) | ≥85% of unaged |
| | Elongation (%) | ≥50% of unaged |
| Aging Period (°C x hrs) | | 100x240 |
| Cold Bend (No Visible Crack) | | -40±2°C |
| Temperature Range | | -20 ~ 75°C |
| Velocity of Propagation (%) NVP | | 68 |



1000' Pull Box
Weight: 25 lbs.

AVAILABLE CATEGORY 5E (PART NUMBERS)

| PVC | Plenum | Shielded | Shielded Plenum | Direct Burial | Shielded Direct Burial |
|-------------|-------------|------------|-----------------|---------------|------------------------|
| 5ECMR150CO | 5ECMP244Bx | 5ESHDCMRBx | 5ESHDCMPBx | 5EOUT244RB | 5EOUTGSHDRB |
| 5ECMR244Bx | 5ECMP150CO | | | 5EOUTG244RB | 5EOUTWSHDRB |
| 5ECMR2425RG | 5ECMP2425RO | | | 5EOUTW244RB | 5EOUTSHDDJRB |
| 5ECMSTRxx | | | | 5EOUTA244RB | |

Toll Free: (866) 945-5051
Local: (770) 945-5051
Fax: (770) 945-9582
www.commoditycables.com



*All values in this specification are nominal and are subjective to tolerances of +/- 10 to 15%.
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PART NO. 5ESHDCMPBX

ELECTRICAL PERFORMANCE

ACRF - Attenuation to Crosstalk Ratio - Far End (dB/100m)

NEXT - Near End Crosstalk (dB/100m)

ACR - Attenuation to Crosstalk Ratio (dB/100m)

PSNEXT - Power Sum Near End Crosstalk (dB/100m)

ELFEXT - Equal Level Far End Crosstalk (dB/100m)

PSELFEXT - Power Sum Equal Level Far End Crosstalk (dB/100m)

RL - Return Loss (dB)

TCL - Transverse Conversion Loss (dB/100m)

ATT - Attenuation (dB/100m)

| FREQUENCY (MHz) | ATT (dB/100m) | RL (dB) | ACR (dB) | Next (dB) | PSNEXT (dB) | TCL (dB/100m) | PHASE DELAY | ELFEXT (dB/100m) | PSELFEXT (dB/100m) |
|-----------------|---------------|---------|----------|-----------|-------------|---------------|-------------|------------------|--------------------|
| 1 | 2.0 | 20.0 | 63.3 | 65.3 | 62.3 | n/s | 570.0 | 63.8 | 60.8 |
| 4 | 4.1 | 23.0 | 52.2 | 56.3 | 53.3 | n/s | 552.0 | 51.7 | 48.7 |
| 8 | 5.8 | 24.5 | 46.0 | 51.8 | 48.8 | n/s | 546.7 | 45.7 | 42.7 |
| 10 | 6.5 | 25.0 | 43.8 | 50.3 | 47.3 | n/s | 545.4 | 43.8 | 40.8 |
| 16 | 8.2 | 25.0 | 39 | 47.2 | 44.2 | n/s | 543.0 | 39.7 | 36.7 |
| 20 | 9.3 | 25.0 | 36.5 | 45.8 | 42.8 | n/s | 542.1 | 37.7 | 34.7 |
| 25 | 10.4 | 24.3 | 33.9 | 44.3 | 41.3 | n/s | 541.2 | 35.8 | 32.8 |
| 31.25 | 11.7 | 23.6 | 31.2 | 42.9 | 39.9 | n/s | 540.4 | 33.9 | 30.9 |
| 62.5 | 17.0 | 21.5 | 21.4 | 38.4 | 35.4 | n/s | 538.6 | 27.8 | 24.8 |
| 100 | 22 | 20.1 | 13.3 | 35.3 | 32.3 | n/s | 537.6 | 23.8 | 20.8 |
| 200 | 29.0 | 18.0 | 1.8 | 30.8 | 27.8 | n/s | 536.5 | 17.7 | 14.7 |
| 350 | 44.9 | 16.3 | -- | 27.2 | 26.3 | n/s | 535 | 12.9 | 9.9 |

Electrical performance with frequency over 250MHz is only for reference

| AVAILABLE JACKET COLORS | | | |
|-------------------------|-----------------------|--------|--------|
| STANDARD | BLUE | WHITE | GRAY |
| | BLACK | RED | GREEN |
| | YELLOW | ORANGE | PURPLE |
| | PINK | | |
| SPECIAL | Per Customer Request* | | |
| INSULATION COLORS | | | |
| PAIR 1 | BLUE | WHITE | |
| PAIR 2 | ORANGE | WHITE | |
| PAIR 3 | GREEN | WHITE | |
| PAIR 4 | BROWN | WHITE | |

JACKETS ABBREVIATION

| | | |
|--------|----|--|
| Black | B | Last alphabetical character of each part number indicates the color code that the Jacket is available in. For example Part # 6CMR244Bx ("x" indicates all the colors to the left are available for this product. |
| White | W | |
| Gray | G | |
| Blue | O | |
| Yellow | Y | |
| Green | V | |
| Orange | OR | |
| Purple | P | |
| Red | R | |
| Pink | PI | |

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