

## Customer Specification - 38891-008

### 5E HI-NET 350 CMP

#### CUSTOMER

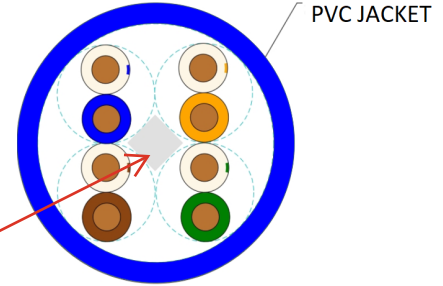
PROTERIAL CABLE AMERICA INC.

#### CUSTOMER P/N

38891-008

#### CONSTRUCTION

**CONDUCTOR:** 23 AWG SOLID  
**INSULATION:** THERMOPLASTIC - COLOR CODED PER TABLE  
 0.040" NOM OD (1.02 mm)  
**PAIRS:** COMPONENTS ARE TWISTED INTO PAIRS WITH VARYING LAYS TO MINIMIZE CROSSTALK.  
**CABLE:** THE FOUR TWISTED PAIRS ARE CABLED TOGETHER WITH A DIAMOND FILLER.  
**RIPCORD**  
**JACKET:** PVC - BLU 0.205" NOM OD (5.2mm)  
**MARKING:** CABLE IS PRINTED WITH THE FOLLOWING LEGEND: 2 Feet Intervals



| Pair | Color       | Pair | Color       |
|------|-------------|------|-------------|
| 1    | WHT/BLU-BLU | 3    | WHT/GRN-GRN |
| 2    | WHT/ORN-ORN | 4    | WHT/BRN-BRN |

**PROTERIAL CABLE AMERICA - 350 ENHANCED CATEGORY 5e --- 4PR/24 c(UL)us CMP - VERIFIED (UL) CAT 5e ANSI/TIA 568.2-D - ZZ/YY (XXXXX) - Mx - R# - NNNN FEET**

WHERE: ZZ = MONTH OF MFG, YY = YEAR OF MFG, XXXXX = JOB NUMBER, x = RESPOOL MACHINE #, # = MASTER REEL NUMBER, NNNN = SEQUENTIAL FOOTAGE MARKERS

#### APPROVALS/RATINGS

AGENCY APPROVALS: UL CMP

#### ELECTRICAL CHARACTERISTICS

**CHARACTERISTIC IMPEDANCE:** 100 ± 15 Ohm (1.0-100 MHz)  
**MAXIMUM CONDUCTOR RESISTANCE:** 9.38 Ohm/100 m @ 20°C  
**MAXIMUM RESISTANCE UNBALANCE:** 5%  
**MAXIMUM MUTUAL CAPACITANCE:** 5.6 nF/100 m @ 1 kHz  
**MAXIMUM CAPACITANCE UNBALANCE:** 330 pF/100 m  
**MAXIMUM DELAY SKEW:** 25 ns/100 m

| Frequency (MHz) | Insert Loss Max (dB/100m) | Next Loss Min (dB/100m) | Next Loss Min PS (dB/100m) | ACR Min (dB/100m) | ACR Min PS (dB/100m) | ELFEXT Min (dB/100m) | ELFEXT Min PS (dB/100m) | Return Loss Min (dB/100m) | Delay Max (ns/100m) |
|-----------------|---------------------------|-------------------------|----------------------------|-------------------|----------------------|----------------------|-------------------------|---------------------------|---------------------|
| 0.772           | 1.8                       | 73.0                    | 70.0                       | 71.2              | 68.2                 | 72.0                 | 69.0                    | -----                     | -----               |
| 1.0             | 2.0                       | 71.3                    | 68.3                       | 69.3              | 66.3                 | 69.8                 | 66.8                    | 20.0                      | 570                 |
| 4.0             | 4.1                       | 62.3                    | 59.3                       | 58.2              | 55.2                 | 57.7                 | 54.7                    | 23.0                      | 552                 |
| 8.0             | 5.8                       | 57.8                    | 54.8                       | 52.0              | 49.0                 | 51.7                 | 48.7                    | 24.5                      | 547                 |
| 10.0            | 6.5                       | 56.3                    | 53.3                       | 49.8              | 46.8                 | 49.8                 | 46.8                    | 25.0                      | 545                 |
| 16.0            | 8.2                       | 53.3                    | 50.3                       | 45.0              | 42.0                 | 45.7                 | 42.7                    | 25.0                      | 543                 |
| 20.0            | 9.3                       | 51.8                    | 48.8                       | 42.5              | 39.5                 | 43.7                 | 40.7                    | 25.0                      | 542                 |
| 25.0            | 10.4                      | 50.3                    | 47.3                       | 39.9              | 36.9                 | 41.8                 | 38.8                    | 24.3                      | 541                 |
| 31.25           | 11.7                      | 48.9                    | 45.9                       | 37.2              | 34.2                 | 39.9                 | 36.9                    | 23.6                      | 540                 |
| 62.5            | 17.0                      | 44.4                    | 41.4                       | 27.4              | 24.4                 | 33.8                 | 30.8                    | 21.5                      | 539                 |
| 100.0           | 22.0                      | 41.3                    | 38.3                       | 19.3              | 16.3                 | 29.8                 | 26.8                    | 20.1                      | 538                 |
| 155.0*          | 28.1                      | 38.5                    | 35.5                       | ---               | ---                  | 25.9                 | 22.9                    | 18.8                      | 537                 |
| 200.0*          | 32.4                      | 36.8                    | 33.8                       | ---               | ---                  | 23.7                 | 20.7                    | 18.0                      | 537                 |
| 250.0*          | 36.9                      | 35.3                    | 32.3                       | ---               | ---                  | 21.8                 | 18.8                    | 17.3                      | 536                 |
| 300.0*          | 41.0                      | 34.2                    | 31.2                       | ---               | ---                  | 20.2                 | 17.2                    | 16.8                      | 536                 |
| 350.0*          | 44.9                      | 33.2                    | 30.2                       | ---               | ---                  | 18.9                 | 15.9                    | 16.3                      | 536                 |
| 400.0*          | 48.5                      | 32.3                    | 29.3                       | ---               | ---                  | 17.7                 | 14.7                    | 15.9                      | 536                 |

\*Any frequencies beyond TIA and ISO requirements are for information only.

THE IMPEDANCE VALUES ABOVE REFLECT ACTUAL INPUT IMPEDANCE DATA. THE HI-NET FAMILY DOES NOT UTILIZE CURVE SMOOTHING OR FITTING WHEN MEASURING AND REPORTING IMPEDANCE DATA. THE HI-NET SERIES MEETS INTERNATIONAL REQUIREMENTS FOR NON-

Catalog Number: 38891-0008-XXX-PCA-650-S-01000-4562-00  
 Reference Number: P3B00881485BL3  
 RFQ#:  
 Cable Weight: 25.1 lbs/kft  
 Copper Weight: 12.2 lbs/kft

| Revision    | Date      | Engineer  |
|-------------|-----------|-----------|
| A           | 8/20/2024 | J. Savoie |
| Customer    |           |           |
| Approved By |           | Date      |
|             |           |           |

## Customer Specification - 38891-008

FITTED INPUT IMPEDANCE. THIS CABLE EXCEEDS THE REQUIREMENTS OF ANSI/TIA 568.2-D FOR CATEGORY 5e AND IS SWEPT TESTED THROUGH 400 MHz. PROTERIAL CABLE AMERICA HI-NET 350 ENHANCED CATEGORY 5e CABLES PROVIDE A WORST CASE HEADROOM OF +6dB OVER CURRENT TIA AND ISO STANDARDS FOR NEXT LOSS, PSNEXT LOSS, AND +4dB FOR ELFEXT, AND PSELFEXT.

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