



REMEE PN: RMMS5BE+725181

09/21/09
Rev.0

1.0 Cat5e Construction Details:

No. 24 AWG copper conductor insulated with FEP. Two colored mated insulated conductors twisted together to form a pair and four pairs assembled to form a core.

Color Code:

| Pair | Primary 1 | Primary 2 |
|------|--------------|-----------|
| 1 | White/Blue | Blue |
| 2 | White/Orange | Orange |
| 3 | White/Green | Green |
| 4 | White/Brown | Brown |

Standards:

ANSI/TIA/EIA 568B.2 Category 5e

National Electric Code – Article 800

Codes and Listings:

CMP rating
ETL Electrically Verified to ANSI/TIA/EIA
568B.2 Category 5e
C(ETL)US

Applications:

Supports all category 5 applications including Ethernet 100BASE-TX, 100BASE-VG and 155 ATM. Particularly suited for high bandwidth applications such as 622 ATM, Wideband, and Ethernet 1000BASE-T.

Environmental Characteristics:

Temperature Rating:
- Installation: 0°C to 50°C
- Operation: -10°C to 60°C
Maximum installing tension: 25 lbf

Electrical Parameters:

Mutual Capacitance: 14 pF/ft nominal
Capacitance Unbalance: 330 pF/ft maximum
Velocity of Propagation: 72%

Max. Conductor D.C.R.: 28.6 ohm/1000 feet
Max. DCR Unbalance: 3%
Max. Delay Skew: 15.0ns/100m
Max. Propagation Delay Skew: 5.7 ns/100m
Characteristic Impedance:
from 0.772 – 100 MHz 100 ± 15%

Electrical Characteristics:

| Frequency | SRL | Return Loss | Attenuation | NEXT | PS-NEXT | ELFEXT | PS-ELFEXT |
|-----------|---------|-------------|-------------|---------|---------|---------|-----------|
| | dB | dB | dB(100m) | dB | dB | dB | dB |
| MHz | Minimum | Minimum | Maximum | Minimum | Minimum | Minimum | Minimum |
| 1 | 23.0 | 20.0 | 2.0 | 70.3 | 68.3 | 63.8 | 60.8 |
| 4 | 23.0 | 20.3 | 4.0 | 61.3 | 59.3 | 51.7 | 48.7 |
| 10 | 23.0 | 25.0 | 6.4 | 55.3 | 53.3 | 43.8 | 40.8 |
| 16 | 23.0 | 25.0 | 8.2 | 52.3 | 50.3 | 39.7 | 36.7 |
| 20 | 23.0 | 25.0 | 9.2 | 50.8 | 48.8 | 37.7 | 34.7 |
| 31.25 | 21.1 | 23.6 | 11.7 | 47.9 | 45.9 | 33.9 | 30.9 |
| 62.5 | 18.1 | 21.5 | 16.9 | 43.4 | 41.4 | 27.8 | 24.8 |
| 100 | 16.0 | 20.1 | 21.9 | 40.3 | 38.3 | 23.8 | 20.8 |

2.0 2C18 MECHANICAL

- 2.1 Conductor: 18AWG Stranded tin copper.
- 2.2 Dielectric insulation: Remguard plenum polymer
- 2.3 Color code: Black, Red
- 2.4 Shield: Aluminum/polyester (100% coverage)
- 2.5 Drain wire: Stranded tin copper

3.0 OVERALL CONSTRUCTION

- 3.1 5be core and 2c18awg shielded are each pulled in parallel at extrusion in a siamese construction
- 3.2 Jacket: Remguard plenum polymer.
- 3.3 Jacket thickness: 0.018 in., nominal.
- 3.4 Color: Per customer requirement
- 3.5 Overall O.D.:
 - Minor over 5be: 0.185 in., nominal.
 - Minor over 2c18: 0.168 in., nominal
 - Major: 0.378 in., nominal
- 3.6 Surface print: SIMPLEX II ETL VERIFIED CAT5E 3122598 CAT5E 24AWG 4UTP 2C18AWG CMP C(ETL)US CSA FT6 + Sequential footage marking

4.0 PREPARATION FOR DELIVERY

The cables shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.