

### SPECIFICATION CONTROL DRAWING

## C6A-26C444XB24A

# CAT6a CABLE, AWG 26

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#### THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

#### CONSTRUCTION DETAILS

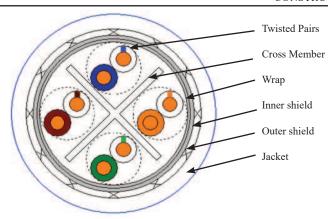


TABLE I - Color Coding

| Pair # | Conductor #1             | Conductor #2 |  |  |
|--------|--------------------------|--------------|--|--|
| 1      | 96 (white/blue stripe)   | 6 (blue)     |  |  |
| 2      | 93 (white/orange stripe) | 3 (orange)   |  |  |
| 3      | 95 (white/green stripe)  | 5 (green)    |  |  |
| 4      | 91 (white/brown stripe)  | 1 (brown)    |  |  |

| TABLE II       |   |            |  |  |  |  |  |
|----------------|---|------------|--|--|--|--|--|
| Pair Component | Dimensions inches (nom)                             |            |  |  |  |  |  |
| Conductor:     | AWG 26 19/38, silver high strength copper alloy     | .0185      |  |  |  |  |  |
| Insulation     | FEP (Pair # 1 & 3)                                  | .036       |  |  |  |  |  |
|                | FEP (Pair # 2 & 4)                                  | .035       |  |  |  |  |  |
| Cable Assembly |   |            |  |  |  |  |  |
| Core:          | 4 Pairs   | .179       |  |  |  |  |  |
| Wrap:          | PTFE .002" inch thick                               | .187       |  |  |  |  |  |
| Inner Shield:  | Al-Polyimide, Al facing out                         | .195       |  |  |  |  |  |
| Outer Shield:  | AWG 40, silver-coated copper<br>Coverage: 92% (min) | .208       |  |  |  |  |  |
| Jacket:        | FEP, .015 inch thickness                            | .238 +.012 |  |  |  |  |  |
| Weight:        | 45.00 lb/kft (max)                                  |            |  |  |  |  |  |

Designate outer jacket color with a dash number appended to the part number. Example: White jacket; C6A-26C444XB24A-9 Color code designators shall be in accordance with MIL-STD-681. An "L" after the number indicates a light color.

#### ELECTRICAL CHARACTERISTICS

#### TABLE III

| Frequency<br>MHz | Insertion<br>Loss<br>dB/65m<br>(max) | Return<br>Loss<br>dB/100m<br>(min) | NEXT<br>dB/100m<br>(min) | ACRF<br>dB/65m<br>(min) | PS<br>NEXT<br>dB/100m<br>(min) | PSACRF<br>dB/65m<br>(min) | TCL<br>dB/100m<br>(min) | ELTCL<br>dB/100m<br>(min) | Propagation<br>Delay<br>ns/100m<br>(max) |
|------------------|--------------------------------------|------------------------------------|--------------------------|-------------------------|--------------------------------|---------------------------|-------------------------|---------------------------|--|
| 1                | 2.1                                  | 20.0                               | 74.3                     | 67.8                    | 72.3                           | 64.8                      | 40.0                    | 35.0                      | 570                                      |
| 4                | 3.8                                  | 23.0                               | 65.3                     | 55.8                    | 63.3                           | 52.8                      | 40.0                    | 23.0                      | 552                                      |
| 8                | 5.3                                  | 24.5                               | 60.8                     | 49.7                    | 58.8                           | 46.7                      | 40.0                    | 16.9                      | 547                                      |
| 10               | 5.9                                  | 25.0                               | 59.3                     | 47.8                    | 57.3                           | 44.8                      | 40.0                    | 15.0                      | 545                                      |
| 16               | 7.5                                  | 25.0                               | 56.2                     | 43.7                    | 54.2                           | 40.7                      | 38.0                    | 10.9                      | 543                                      |
| 20               | 8.4                                  | 25.0                               | 54.8                     | 41.8                    | 52.8                           | 38.8                      | 37.0                    | 9                         | 542                                      |
| 25               | 9.4                                  | 24.3                               | 53.3                     | 39.8                    | 51.3                           | 36.8                      | 36.0                    | 7                         | 541                                      |
| 31.25            | 10.5                                 | 23.6                               | 51.9                     | 37.9                    | 49.9                           | 34.9                      | 35.1                    | 5.5                       | 540                                      |
| 62.5             | 15.0                                 | 21.5                               | 47.4                     | 31.9                    | 45.4                           | 28.9                      | 32.0                    |                           | 539                                      |
| 100              | 19.1                                 | 20.1                               | 44.3                     | 27.8                    | 42.3                           | 24.8                      | 30.0                    |                           | 538                                      |
| 200              | 27.6                                 | 18.0                               | 39.8                     | 21.8                    | 37.8                           | 18.8                      | 27.0                    |                           | 537                                      |
| 250              | 31.1                                 | 17.3                               | 38.3                     | 19.8                    | 36.3                           | 16.8                      | 26.0                    |                           | 536                                      |
| 300              | 34.3                                 | 16.8                               | 37.1                     | 18.3                    | 35.1                           | 15.3                      | 25.2                    |                           | 536                                      |
| 400              | 40.1                                 | 15.9                               | 35.3                     | 15.8                    | 33.3                           | 12.8                      | 24.0                    |                           | 536                                      |
| 500              | 45.3                                 | 15.2                               | 33.8                     | 13.8                    | 31.8                           | 10.8                      | 23.0                    |                           | 536                                      |

Note: Values in Table III for RL and NEXT are for reference only. Actual values shall be determined utilizing the formulas in ANSI/TIA-568.2 (issue in effect). (Electrical Characteristics continued on Page 2)

TE Connectivity Corporation Raychem Wire & Cable 501 Oakside Avenue Redwood City, California 94063-3800 1-800-522-6752

Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order. Users should evaluate the suitability of this product for their application. TE Connectivity Corporation also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

This specification sheet takes precedence over documents referenced herein. Referenced documents shall be of the issue in effect on date of invitation for bid.

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#### ELECTRICAL CHARACTERISTICS (CONTINUED)

Electrical Testing: In accordance with ANSI/TIA-568.2 (issue in effect).

Capacitance: Mutual Capacitance: 5.6 nF/100 m (nom) at 1 kHz.

Pair to ground capacitance unbalance: 330 pF/100 m (max) at 1 kHz.

Conductor DC Resistance: 43.9 ohms/1000 ft (nominal) @ 20°C

Velocity of Propagation: 70% (nominal)

### ADDITIONAL REQUIREMENTS & RATINGS

Temperature Rating: -55°C to 200°C

Voltage Withstand: 1000 volts (rms), conductor to conductor and shield.

500 volts (rms) shield to shield when applicable per NEMA WC 27500.

Jacket:

Tensile Strength: 2000 psi (minimum) Elongation: 200% (minimum)

Jacket Flaws: Spark test: 2.5 kV (rms)

Impulse dielectric test: 6.0 kV (peak)

Flammability: Shall meet the requirements of FAR Part 25, Appendix F, Part I, when tested in accordance with the 60° test specified therein.

Cable will be supplied in 50 ft minimum lengths unless otherwise specified.