PIC Datamates

PIC E74826

BULLETIN ISO 11801 - CLASS F (CAT 7) ETHERNET CABLE

CABLE CONSTRUCTION

- 1. ETFE Jacket (White) Laser Markable
- 2. Silver-Plated Copper Round Braid Shield
- 3. Aluminum/Polyester (Each Pair)
- 4. Foamed Fluoropolymer Insulation
- 5. Silver-Plated High Strength Copper Alloy Conductors

COLOR CODES

Pair #1: Blue, White/Blue

- Pair #2: Green, White/Green
- Pair #3: Brown, White/Brown
- Pair #4: Orange, White/Orange

PIC's DataMATES Ethernet cables incorporate innovative design features that provide maximum electrical performance in a small, lightweight, flexible package.

Each pair uses a SP High Strength Copper alloy conductor and is individually shielded. PIC's E74826 cable delivers 10 Gbit performance per ISO 11801, Class F Channel requirements.

E74826 cable cannot only be used for 10 Gbit Ethernet applications but also can be used for video applications because of the low skew between each pair (3 nS /70m nom).

An ETFE jacket which is laser-markable, passed EN3475-503 Scrape Abrasion testing and is also very flexible for ease of installation.

E74826 is ideal for harsh environment applications that demand high reliability, maximum flexibility and light weight, such as cabin management, in-flight entertainment, internet backbones. It is Skydrol resistant, RoHS compliant and passes the FAA flammability requirements of FAR Part 23 and 25, Appendix F.



PHYSICAL DATA

| Conductors | 26 AWG (19/38) Stranded SPCA |
|-------------------------------------|------------------------------|
| Shield Coverage | 100% (Foil), 90% (Braid) |
| Operating Temperature | -55° to +200°C |
| • Outer Diameter: in (mm) | 0.23 (5.84) |
| • Minimum Bend Radius: in (n | nm) 1.80 (45.72) |
| • Weight: lbs/100 ft (kg/100 | m) 3.3 (4.9) |

ELECTRICAL DATA

| Impedance: ohms | | 100 |
|---------------------------------------|-------------|---------------|
| • Capacitance: pF/ft (m) | | 13.0 (42.7) |
| • Velocity of Propagation: % | | 78.0 |
| Dielectric Voltage Rating (kV RMS) | | 0.9 |
| • DC Resistance: ohms/1000 ft (m) Max | | 44.8 (147.0) |
| • Max Distance: ft (m) | | 230 (70) |
| • Attenuation: Nom / Max | dB/100 ft | (dB/100 m) |
| • @100 MHz | 7.5/9.0 | (24.6 / 29.5) |
| • @250 MHz | 12.3 / 14.7 | (40.4 / 48.2) |
| • @500 MHz | 17.8/21.4 | (58.4 / 70.2) |
| • @600 MHz | 22.5 / 23.7 | (73.8 / 77.8) |

All values nominal unless otherwise noted Note: The max distance is based on maximum channel insertion loss per ISO 11801, Class F







PIC Wire & Cable is a division of The Angelus Corporation, a leading provider of aerospace and defense industry solutions.

PRODUCT BULLETIN

PIC E74826 CONNECTORS

| Description | Connector P/N | Tool P/N |
|---|--------------------------------|--------------------------------------|
| Shielded CAT 6a, 90° Plug w/ATUM Strain Relief | 110912 (568A) 110900 (568B) | 110701 - Soft Jaw Clamping Pliers |
| Shielded CAT 6a, Jack w/ATUM Strain Relief | 110937 (568A) 110938 (568B) | 110701 - Soft Jaw Clamping Pliers |
| Shielded CAT 8.1, RJ45 Plug | 111112 (568B) | 110701 - Soft Jaw Clamping Pliers |
| Siemon CAT 7 (Tera) Plug, 4 Pair, 26 AWG | 110811 | 110701 - Soft Jaw Clamping Pliers |
| Siemon CAT 7 (Tera) Jack, 4 Pair, 26 AWG | 110813 | 110701 - Soft Jaw Clamping Pliers |

E74826 is an ethernet cable that can be terminated in a variety of ways.

This cable can be terminated into the RJ45 connectors referenced above.

Call PIC For Availability







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