# PIC Datamates

## **PIC E13426**

10/100 BASE-T 2-PAIR (4-CONDUCTOR) CABLE

#### **CABLE CONSTRUCTION**

- 1. PTFE Tape Jacket (White) Laser Markable
- 2. Silver-Plated Copper Braided Shield
- 3. PTFE Tape Binder
- 4. Solid PFA Conductor Insulation
- 5. Silver-Plated High Strength Copper Alloy Conductors

#### **COLOR CODES**

Pair #1 - White/Blue Pair #2 - Green/Orange

PIC's DataMATES Ethernet cables incorporate innovative design features that provide maximum electrical performance in a small, light weight and flexible package. Using 26 AWG silver-plated, high strength copper alloy conductors and a laser markable PTFE jacket, PIC's E13426 delivers CAT 5e performance up to 224 ft with up to 45% less weight and up to 50% more flexibility.

Data transmission aboard aircraft faces more severe environmental and EMI situations than conventional LAN systems in commercial buildings, hence special measures have been taken to preserve technical performance. Silver-plated copper conductors and shielding assure uniform conductivity with excellent solderability. An PTFE jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

E13426 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	80% (Braid)
• Operating Temperature	-55° to +200°C
• Outer Diameter: in (mm)	0.16 (3.99)
• Minimum Bend Radius: in (	mm) 0.50 (12.70)
• Weight: lbs/100 ft (kg/100	m) 2.0 (2.9)

#### **ELECTRICAL DATA**

Impedance: ohms		100
• Capacitance: pF/ft (m)		14.5 (47.6)
• Velocity of Propagation: %		70.0
Dielectric Voltage Rating (kV RMS)		1.5
• DC Resistance: ohms/1000 ft (m) Max		44.8 (147.0)
• Max Distance*: ft (m)		224 (68)
• Attenuation: Nom / Max	dB/100 ft	(dB/100 m)
• @10 MHz	2.7 / 3.1	(9.8 / 10.2)
• @100 MHz	8.7 / 10.5	(28.5 / 34.4)

All values nominal unless otherwise noted \*Note: The max distance is based on maximum channel insertion loss per ANSI/TIA-568-C.2







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

# PIC Data MATES **PRODUCT BULLETIN**

### **PIC E13426 CONNECTORS**

Description	Connector P/N	Tool P/N
Shielded CAT 5e, Plug w/ATUM Strain Relief	110506	110288 - RJ45 Crimp Tool
Shielded CAT 5e, Plug w/Protective Boot	110726	110288 - RJ45 Crimp Tool
Shielded CAT 6, Plug w/ATUM Strain Relief (fits Amphenol (RJF) ruggedized backshell)	110789	110288 - RJ45 Crimp Tool
Shielded CAT 6a, Jack w/ATUM Strain Relief	110939	110701 - Soft Jaw Clamping Pliers
Siemon CAT 7 (Tera) Plug, 2 Pair, 26 AWG	110815*	110701 - Soft Jaw Clamping Pliers

**Call PIC For Availability** 





