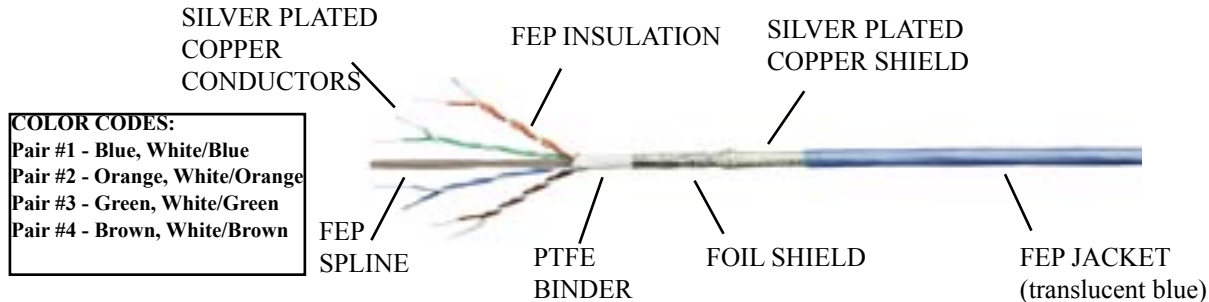


10GBASE-T CATEGORY 6A ETHERNET 4-PAIR (8-Conductor) CABLE



This cable has been specially designed by PIC for airborne 10 Gigabit Ethernet Local Area Network applications. The twisted-pair construction (four separate pairs) effectively reduces inductive interference while 100% foil and 90% braided shielding serve to further protect against EMI.

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 FEP jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

E6A0824 meets ANSI/TIA-568B Category 6a requirements up to 240 feet. It is Skydrol resistant, RoHS compliant and passes the FAA flammability requirements of FAR Part 23 and 25, Appendix F. Test results are available upon request.

PHYSICAL DATA

Conductors	24 AWG Stranded SPC
Shield Coverage	100% (Foil), 90% (Braid)
Outer Diameter (in.)	0.275
Temperature	-55° to +200°C
Min. Bend Radius (in.)	1.40
Weight (lbs / 100ft)	5.5

ELECTRICAL DATA

Impedance (ohms)	100
Capacitance Between Conductors (pF/ft)	14.5
Velocity of Propagation (%)	70
Attenuation (dB/100ft.) Max	
@ 10 MHz	2.3
@ 100 MHz	7.5
@ 500 MHz	18.7
Dielectric Voltage Rating (KV RMS)	1.5
Structural Return Loss (SRL)	
@ 10 MHz	25.0
@ 100 MHz	20.1
@ 250/500 MHz	15.2
Near-End Cross-Talk (NEXT) (dB) Min.	
@ 10 MHz	59.3
@ 100 MHz	44.3
@ 250 MHz	38.3
@ 500 MHz	33.8
DC Resistance (Ohms/100 ft.) Max	2.42

All values nominal unless otherwise noted.

**Most Cables are in Stock and Available for Quick Delivery
Please Contact Customer Service for Details @ 262-246-0500**



Connectors

E6A0824 is a Category 6a (10Gb) ethernet cable that can be terminated in a variety of ways.

The following PIC RJ45 connectors can be used up to 240 feet at Cat 6a frequencies:

RJ45 Shielded Plug (T568A)	PIC P/N 110650
RJ45 Shielded Plug (T568B)	PIC P/N 110649
RJ45 Shielded Jack (T568A)	PIC P/N 110652
RJ45 Shielded Jack (T568B)	PIC P/N 110651

E6A0824 may also be terminated into miniature circulator connectors such as the Mighty Mouse connector made by GlenAir. These connectors provide a durable ruggedized solution option to the RJ45. Contact PIC Wire for more information about these connectors.

** Call PIC for availability*

**Most Cables are in Stock and Available for Quick Delivery
Please Contact Customer Service for Details @ 262-246-0500**

