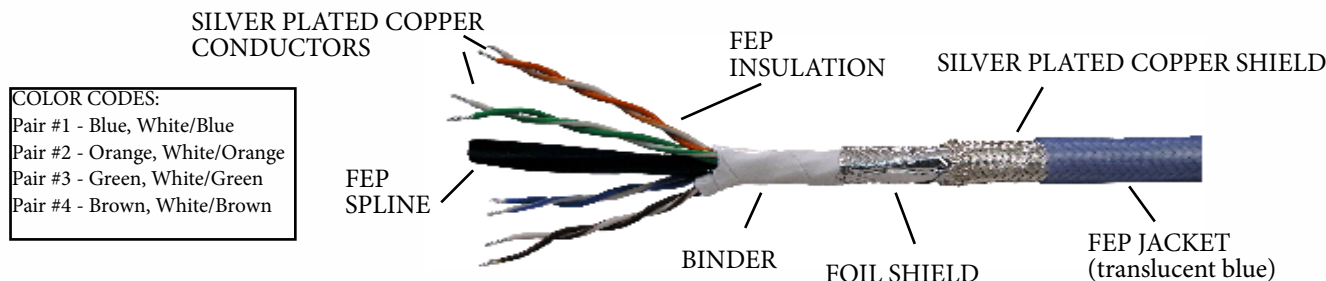




1000BASE-T GIGABIT ETHERNET 4-PAIR (8-Conductor) CABLE



This cable has been specially designed by PIC for airborne Gigabit Ethernet Local Area Network applications up to 240 feet. The twisted-pair construction (four separate pairs) effectively reduces inductive interference while 100% foil and 92% 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.

E50824 exceeds ANSI/TIA-568B Category 6 requirements. 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.

This product is also available with a black FEP jacket under product number G50824.

PHYSICAL DATA

ELECTRICAL DATA

Conductors	24 AWG Stranded SPC	Impedance (ohms)	100
Shield Coverage	100% (Foil), 92% (Braid)	Capacitance Between Conductors (pF/ft)	14.5
Outer Diameter (in.)	0.265	Velocity of Propagation (%)	70
Temperature	-55° to +200°C	Attenuation (dB/100ft.) Max	
Weight (lbs / 100ft)	4.8	@ 10 MHz	2.4
		@ 100 MHz	8.0
		@ 250 MHz	12.2
		Dielectric Voltage Rating (KV RMS)	1.5
		Structural Return Loss (SRL) (dB) Min	
		@ 10 MHz	-25.0
		@ 100 MHz	-20.1
		@ 250 MHz	-17.3
		Near-End Cross-Talk (NEXT) (dB) Min.	
		@ 10 MHz	-59.3
		@ 100 MHz	-44.3
		@ 250 MHz	-38.3
		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

E50824 is a Category 6 ethernet cable normally terminated with RJ45 connectors. PIC has a wide variety of RJ45 connectors available including those listed below.

Shielded Cat 6 RJ45 Plus w/Sleeve	110303
Shielded Cat 6 RJ45 Plus w/Boot	110339
Shielded Cat 6 RJ45 Plus (for use with ruggedized housing)	110361
Shielded Cat 6 RJ45 Jack	110382
Crimp Tool	110288

E50824 is also compatible with the innovative RJ45 BladePatch connector (pictured below). The BladePatch connector features a unique design that locks into a standard RJ45 jack without using the standard RJ45 locking tab that is difficult to access and easy to break. Simply push the BladePatch connector into the jack to lock, pull back on the connector body to release. This connector is only available in assemblies built by PIC Wire. Please contact PIC Wire for more information.



E50824 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.

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