



100 Ω 4-PAIR HIGH SPEED DATA CABLE



This cable has been specially designed by PIC for airborne high-speed data applications. The twisted-pair construction (four separate pairs) effectively reduces inductive interference while 100% foil (for each pair) plus braided shielding over each pair and an overall shield serves 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.

Conductor insulation consists of foamed FEP, having a higher velocity of propagation. This assures correct impedance matching, thus minimizing reflection — important in high-speed data applications. This permits smaller overall diameter and weight, at the same time retaining performance and required operating parameters. Each pair is individually shielded and jacketed to isolate it from the other pairs.

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.

E30824 exceeds ANSI/TIA-568B Category 5e 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.

PHYSICAL DATA		ELECTRICAL DATA	
Conductors	24 AWG Stranded SPC	Impedance (ohms)	100
Shield Coverage (Cond)	100% (Foil), 90% (Braid)	Capacitance Between Conductors (pF/ft)	13.0
Shield Coverage (Overall)	85% (Braid)	Velocity of Propagation (%)	80
Outer Diameter (in.)	.454	Attenuation (dB/100 ft) Max.	
Temperature	-55° to +150°C	@ 10 MHz	2.2
		@ 100 MHz	7.5
Min. Bend Radius (in.)	2.25	Dielectric Voltage Rating (KV RMS)	1.5
Weight (lbs / 100ft)	12.4	Structural Return Loss (SRL) (dB) Min.	
		@ 10 MHz	23.0
		@ 100 MHz	16.0
All values nominal unless otherwise noted.		Near-End Cross-Talk (NEXT) (dB) Min.	
		@ 10 MHz	50.3
		@ 100 MHz	35.3
		DC Resistance (Ohms/100 ft. Maximum)	2.42

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

