

CABLE CONSTRUCTION

Conductors: Silver-Plated High Strength Copper Alloy

Dielectric: PFA

Spline: Fluoropolymer **Binder:** PTFE Tape

COLOR CODES

Pair #1:Blue, White/Blue StripePair #3:Green, White/Green StripePair #2:Orange, White/Orange StripePair #4:Brown, White/Brown Stripe

The E6A6824 Cat 6a Ethernet cable incorporates innovative design features to provide maximum electrical performance in a small, lightweight, and flexible package. The E6A6824 preserves technical performance by incorporating differential lay lengths between pairs and utilizing a foil and braided shield and delivers 10 Gigabit (ANSI/TIA-568 Category 6a) performance up to 246 ft. A PTFE ultra-flexible, laser-markable jacket is utilized to make it easier to install the cable. E6A6824 is an excellent selection for Engineers and Technicians installing cabin management systems (CMS), in-flight entertainment (IFE), and Ethernet backbones.

PHYSICAL DATA

Conductor:24 AWG Stranded SPHSCAShield Coverage:100% (Foil), 80% (Braid)Temperature Range:-55 to +200°COuter Diameter: in (mm)0.26 (6.6)Minimum Bend Radius: in (mm)0.78 (19.81)Weight: lbs/100 ft (kg/100 m)4.4 (6.5)

ELECTRICAL DATA

Impedance:100 ohmsCapacitance:pF/ft (m)14.5 (47.6)Velocity of Propagation:70%Dielectric Voltage Rating:(kV, RMS)1.5DC Resistance:ohms/1000 ft (m)28.4 (93.2)Max Distance*:ft (m)246 (75)

Shield #1: Aluminum/Polvimide Foil

Shield #2:

Jacket:

Silver-Plated Copper Braid

PTFE, White (Laser Markable)

ENVIRONMENTAL DATA

Skydrol Resistant: SAE AS4373E, Method 601
RoHS Compliant: RoHS Directive 2002/95/EC)
Flame / Smoke Requirements: FAR Part 25.869 (a) App. F,

Part 1, (a)(3)

Berry Specialty Metals Compliance: Complies with DFARS

252.225-7014, Alt 1

ATTENUATION DATA

	Nom / Max	Nom / Max
Frequency	dB/100 ft	(dB/100 m)
@10 MHz	2.3/2.6	(7.5/8.5)
@100 MHz	7.0/8.4	(23.0/27.6)
@250 MHz	11.4/13.7	(37.4/44.9)
@500 MHz	16.5/20.0	(54.1/65.6)

All values nominal, unless otherwise noted





CONTACTS/CONNECTORS FOR PART # E6A6824

PART #	CONTACT TYPE	TOOL PART #
111170	Shielded CAT 6a, Plug w/ATUM Strain Relief	111183 - RJ45 Crimp Tool
111171	Shielded CAT 6a, Plug w/Strain Relief Sleeve	111183 - RJ45 Crimp Tool
111172	Shielded CAT 6a, Plug w/Protective Boot	111183 - RJ45 Crimp Tool
111173	Shielded CAT 6a, Plug w/ATUM Strain Relief (fits Amphenol (RJF) ruggedized backshell)	111183 - RJ45 Crimp Tool
110912	Shielded CAT 6a, 90° Plug w/ATUM Strain Relief	110701 - Soft Jaw Clamping Pliers
110900	Shielded CAT 6a, 90° Plug w/ATUM Strain Relief	110701 - Soft Jaw Clamping Pliers
110973	Shielded CAT 6a, Plug w/Clamp Nut Strain Relief	110701 - Soft Jaw Clamping Pliers
110975	Shielded CAT 6a, Plug w/ Clamp Nut Strain Relief	110701 - Soft Jaw Clamping Pliers
110937	Shielded CAT 6a, Jack w/ATUM Strain Relief	110701 - Soft Jaw Clamping Pliers
110938	Shielded CAT 6a, Jack w/ATUM Strain Relief	110701 - Soft Jaw Clamping Pliers

