

CABLE CONSTRUCTION

Conductor: Silver-Plated Copper

Dielectric: FEP

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 E6A0824 is a 4-Pair, 10G Base-T Cat 6a Ethernet cable (exceeding ANSI/TIA-568-C.2 CAT 6a Channel Requirements) that incorporates innovative design features to provide maximum electrical performance in a small, lightweight, and flexible package.

Jacket:

The E6A0824's stranded silver-plated copper conductors are designed for high vibration environments, then twisted-pair at different lay lengths to effectively reduce inductive interference. The 100% foil and 90% braided shielding serve to further protect against EMI. A fluoropolymer jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

PHYSICAL DATA

Conductor:	24 AWG Stranded SPC
Shield Coverage:	100% (Foil), 90% (Braid)
Temperature Range:	-55 to +200°C
Outer Diameter: in (mm)	0.275 (6.99)
Minimum Bend Radius: in (mm)	1.4 (35.56)
Weight: lbs/100 ft (kg/100 m)	5.28 (7.9)

ELECTRICAL DATA

Shield #1: Aluminum/Polyester Foil

Shield #2: Silver-Plated Copper Braid

FEP. Translucent Blue

Impedance:	100 ohms
Capacitance: pF/ft (m)	14.5 (47.6)
Velocity of Propagation:	70%
Dielectric Voltage Rating: (kV, RMS)	1.5
DC Resistance: ohms/1000 ft (m)	28.5 (93.5)
Max Distance: ft (m)	246 (75)

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	2.2/2.6	(7.2/8.5)
@100 MHz	6.8/8.2	(22.3/26.9)
@250 MHz	10.9/13.1	(35.8/43.0)
@500 MHz	15.6/18.7	(51.2/61.4)

All values nominal, unless otherwise noted





CONTACTS/CONNECTORS FOR PART # E6A0824

PART #	CONTACT TYPE	TOOL PART #
110506	Shielded CAT 5e/CAT6, Plug w/ATUM Strain Relief	110288 - RJ45 Crimp Tool
110629	Shielded CAT 6, Plug w/ Strain Relief Sleeve	110288 - RJ45 Crimp Tool
110630	Shielded CAT 6, Plug w/ Protective Boot	110288 - RJ45 Crimp Tool
110789	Shielded CAT 6, Plug w/ ATUM Strain Relief (fits Amphenol® (RJF) ruggedized backshell)	110288 - RJ45 Crimp Tool
110912	Shielded CAT 6a, 90° Plug w/ ATUM Strain Relief (568A)	110701 - Soft Jaw Clamping Pliers
110900	Shielded CAT 6a, 90° Plug w/ ATUM Strain Relief (568B)	110701 - Soft Jaw Clamping Pliers
110973	Shielded CAT 6a, Plug w/ Clamp Nut Strain Relief (568A)	110701 - Soft Jaw Clamping Pliers
110975	Shielded CAT 6a, Plug w/ Clamp Nut Strain Relief (568B)	110701 - Soft Jaw Clamping Pliers
110937	Shielded CAT 6a, Jack w/ ATUM Strain Relief (568A)	110701 - Soft Jaw Clamping Pliers
110938	Shielded CAT 6a, Jack w/ ATUM Strain Relief (568B)	110701 - Soft Jaw Clamping Pliers
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

