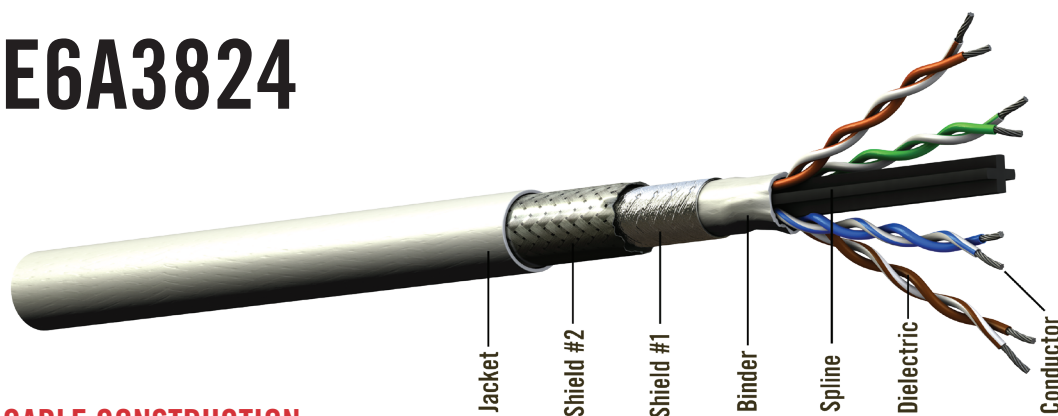


# E6A3824



## CABLE CONSTRUCTION

**Conductors:** Silver-Plated Copper  
**Dielectric:** PFA  
**Spline:** Fluoropolymer  
**Binder:** PTFE Tape

**Shield #1:** Aluminum/Polyimide Foil  
**Shield #2:** Silver-Plated Copper Braid  
**Jacket:** PTFE, White (Laser Markable)

## COLOR CODES

**Pair #1:** Blue, White/Blue Stripe  
**Pair #2:** Orange, White/Orange Stripe

**Pair #3:** Green, White/Green Stripe  
**Pair #4:** Brown, White/Brown Stripe

The E6A3824 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.

The E6A3824's twisted-pair construction (four separate pairs) of silver-plated copper conductors is surrounded by fluoropolymer dielectric that assures uniform conductivity with excellent solderability. The 100% foil and 80% braided shielding serve to further protect against EMI. A PTFE 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), 80% (Braid)  
**Operating Temperature:** -55 to +200°C  
**Outer Diameter:** in (mm) 0.26 (6.6)  
**Minimum Bend Radius:** in (mm) 0.78 (19.81)  
**Weight:** lbs/100 ft (kg/100 m) 4.6 (6.8)

## ELECTRICAL DATA

**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) 262 (80)

## ENVIRONMENTAL DATA

**Skydrol Resistant:** YES, SAE AS4373E, Method 601  
**RoHS Compliant:** YES, 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

Frequency	Nom / Max dB/100 ft	Nom / Max (dB/100 m)
@10 MHz	2.1/2.4	(6.9/7.9)
@100 MHz	6.6/7.9	(21.7/25.9)
@250 MHz	10.7/12.9	(35.1/42.3)
@500 MHz	15.6/18.7	(63.3/75.5)

*All values nominal, unless otherwise noted*

**E6A3824 CAT 6A ETHERNET CABLE**

# CONTACTS/CONNECTORS FOR PART # E6A3824

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
110973	Shielded CAT 6a, Plug w/ATUM Strain Relief	110701 - Soft Jaw Clamping Pliers
110975	Shielded CAT 6a, Plug w/ATUM Strain Relief	110701 - Soft Jaw Clamping Pliers
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
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