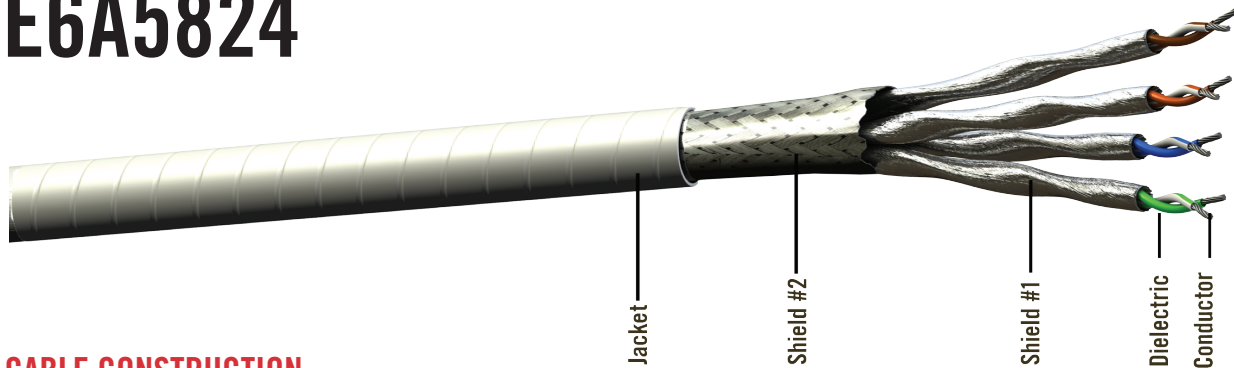


# E6A5824



## CABLE CONSTRUCTION

**Conductors:** Silver-Plated High Strength Copper Alloy  
**Dielectric:** PFA  
**Shield #1:** Aluminum/Polyimide Foil (each pair)  
**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 E6A5824 is a 4-Pair, 10G Base-T Cat 6a Ethernet cable that incorporates innovative design features to provide maximum electrical performance in a small, lightweight, and flexible package. E6A5824 cable cannot only be used for Cat 6a, 10 Gbit Ethernet applications, but also can be used for video applications because of the low skew between each pair.

The E6A5824's twisted-pair construction (four separate pairs) of silver-plated copper conductors are individually shielded. The 100% foil and 90% braided shielding serve to further protect against EMI. A laser-markable PTFE jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

## PHYSICAL DATA

**Conductor:** 24 AWG Stranded SPHSCA  
**Shield Coverage:** 100% (Foil), 90% (Braid)  
**Temperature Range:** -55 to +200°  
**Outer Diameter:** in (mm) 0.255 (6.6)  
**Minimum Bend Radius:** in (mm) 1.3 (33.02)  
**Weight:** lbs/100 ft (kg/100 m) 4.2 (6.3)

## ELECTRICAL DATA

**Impedance:** 100 ohms  
**Capacitance:** pF/ft (m) 13 (42.7)  
**Velocity of Propagation:** 80%  
**Dielectric Voltage Rating:** (kV, RMS) 0.9  
**DC Resistance:** ohms/1000 ft (m) 28.4 (93.2)  
**Max Distance:** ft (m) 296 (90)

## 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

| Frequency | Nom / Max dB/100 ft | Nom / Max (dB/100 m) |
|-----------|---------------------|----------------------|
| @10 MHz   | 1.9/2.1             | (6.2/6.9)            |
| @100 MHz  | 6.6/7.0             | (21.7/23.0)          |
| @250 MHz  | 10.8/11.4           | (35.4/37.4)          |
| @500 MHz  | 15.7/16.6           | (51.5/54.5)          |

*All values nominal, unless otherwise noted*

**E6A5824 CAT 6A ETHERNET CABLE**

# CONTACTS/CONNECTORS FOR PART # E6A5824

| PART # | CONTACT TYPE   | TOOL PART #                       |
|--------|--|-----------------------------------|
| 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 |
| 111179 | Shielded CAT 6a, Plug w/ATUM Strain Relief             | 111184 - RJ45 Crimp Tool          |
| 111180 | Shielded CAT 6a, Plug w/Strain Relief Sleeve           | 111184 - RJ45 Crimp Tool          |
| 111181 | Shielded CAT 6a, Plug w/Protective Boot                | 111184 - RJ45 Crimp Tool          |