

Conductors: Tin-Plated Copper

Dielectric: FEP

Fluoropolymer Spline: Binder: PTFE Tape

## **COLOR CODES**

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

The E6A2824 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 E6A2824's twisted-pair construction (four separate pairs) of tin-plated copper conductors is surrounded by fluoropolymer dielectric that assures uniform conductivity with excellent solderability. The 100% foil and 85% 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 TPC **Shield Coverage:** 100% (Foil), 85% (Braid) Operating Temperature:  $-55 \text{ to } +150^{\circ}\text{C}$ Outer Diameter: in (mm) 0.275 (6.99) Minimum Bend Radius: in (mm) 1.4 (35.56) **Weight:** lbs/100 ft (kg/100 m) 4.55 (6.8)

### **ELECTRICAL DATA**

Shield #2: Tin-Plated Copper Braid

ETFE, White (Laser Markable)

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) 214 (65)

#### 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

	Nom / Max	Nom / Max
Frequency	dB/100 ft	(dB/100 m)
@10 MHz	2.4/2.8	(7.9/9.2)
@100 MHz	7.5/9.0	(24.6/29.5)
@250 MHz	11.7/14.0	(38.4/45.9)
@500 MHz	18.9/22.7	(62.0/74.5)

All values nominal, unless otherwise noted





# CONTACTS/CONNECTORS FOR PART # E6A2824

PART #	CONTACT TYPE	TOOL PART #
110629	Shielded CAT 5e/CAT 6, Plug w/Strain Relief Sleeve	<b>110288</b> - RJ45 Crimp Tool
110630	Shielded CAT 5e/CAT 6, Plug w/Protective Boot	<b>110288</b> - RJ45 Crimp Tool
110789	Shielded CAT 5e/CAT 6, Plug w/ATUM Strain Relief (fits Amphenol® (RJF) ruggedized backshell)	<b>110288</b> - RJ45 Crimp Tool
110912	Shielded CAT 5e/CAT 6, 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

