



# PRODUCT DATA SHEET

Controlled Document – Engineering Drive

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**PART NUMBER:** 977964

**DESCRIPTION:** 23 AWG /4 Pair PLENUM CATEGORY 6 DATA CABLE

- COMPLIANCE:**
- UL Listed Type CMP
  - ANSI/TIA/EIA 568B.2-1
  - (Meets or exceeds) ➤ C(UL) Listed CMP FT6
  - ICEA S-102-700
  - UL Classified Category 6
  - ISO/IEC 11801

*This product complies with European Directive 2002/95/EC (RoHS)*

### Construction Parameters:

			<u>Outer Diameter</u>
Conductors:	Solid Copper		0.022"
Dielectric:	4 pairs FEP	0.0385" average DOD	0.039"
Assembly:	Each pair has different lay length for cross-talk prevention. Ripcord added.		
	Single FEP tape separator.	0.013" nominal thickness	
Jacket:	PVC	0.014" nominal wall thickness	0.195"

### Electrical Properties:

DC Resistance Max.(ohms/100m @ 20°C):	8.9
DC Resistance Unbalance Max.(%):	3
Characteristic Impedance (ohms): 1.0-100 MHz:	85-115
	100-250 MHz: 78-122
Pair-to-Ground Cap. Unbal. Max.(pF/100m):	330
Return Loss (dB) @ 1.0-10.0 MHz:	20 + 5log(F)
	10.0-20.0 MHz:
	25
	20.0-250.0 MHz:
	25-7log(F/20)
Attenuation Max. @100 MHz (db/100m):	22.0

*The attenuation value is for information only. The maximum loss for any pair at room temp. is to be determined using the formula*  
*Att (f) < 1.967 [SQR (f) ] + 0.023 (f) + 0.050/SQR (f)*

#### Crosstalk

NEXT @100 MHz (db/100m):	44.3
PSNEXT @100 MHz (db/100m):	42.3
ELFEXT @100 MHz (db/100m):	27.8
PSELFEXT @100 MHz (db/100m):	24.8

*The cross talk values are for information only. The min. crosstalk loss for any pair combination at room temp. is to be greater than the value determined using the formulas:*

$$NEXT(f_{MHz}) \geq NEXT(100) - 15 \log_{10}(f_{MHz}/100),$$

$$PSNEXT(f_{MHz}) \geq PSNEXT(100) - 15 \log_{10}(f_{MHz}/100),$$

$$ELFEXT(f_{MHz}) \geq ELFEXT(100) - 20 \log_{10}(f_{MHz}/100),$$

$$PSELFEXT(f_{MHz}) \geq PSELFEXT(100) - 20 \log_{10}(f_{MHz}/100).$$

Guaranteed up to 250MHz. 250MHz – 600MHz for information only.

### Miscellaneous Information:

Pair Colors: W/BL with BL, W/OR with O, W/GR with GR, W/BR with BR

Jacket Print: COLEMAN CABLE 977964 E105765 \* 23 AWG TYPE CMP (UL)C(UL)---FT6 -  
 (UL) VERIFIED TO CATEGORY 6 --- TESTED TO 600 MHz - PAT 5767441  
 ##-## ##### - NNNN  
 \* = Letter designating plant of manufacture  
 ##-## = Month - Year  
 ##### = Traceability code  
 NNNN = Tru-Mark footage markers from 1000 – 0

Flame rating: UL NFPA-262 Steiner Tunnel Smoke and Flame Test

Applicable NEC Article: 800-51

Applicable TIA/EIA: 568B.2-1

Approx. Weight (lb/1000 ft): 28

Issued: 04/16/10

By: PEM

Data subject to change without notice.  
Contact your Customer Service Representative for latest information.