



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:

Conductors:	Solid Copper		<u>Outer Diameter</u>
Dielectric:	4 pairs FEP	0.0385" average DOD	0.022"
Assembly:	Each pair has different lay length for cross-talk prevention. Ripcord added.		0.039"
	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.