

### PRODUCT SPECIFICATION

**STANDARD COMPLIANCES:**

All Proposed Category 6 requirements as per ANSI/TIA/EIA, ISO/IEC, and CENELEC EN Standards: ANSI/TIA/EIA 568-C.2 CAT.6, ISO/IEC 11801 CLASS E, 2nd Edition, IEC 61156-6, CENELEC EN 50173-1 CENELEC EN 50288-5-1, CENELEC EN 50288-5-2 Flame Retardancy is verified according to IEC 60332-1-2. We implemented RoHS compliance for the requirement of European Union issued Directive 2002/95/EC



**CONSTRUCTION & CHARACTERISTICS:**

MODEL CODE	C-C6-SLDBLUE / C-C6-SLDGREEN / C-C6-SLDWHITE / C-C6-SLDBLACK / C-C6-SLDYELLOW / C-C6-SLDGREY / C-C6-SLDPURPLE / C-C6-SLDRED			
Conductor	Material	SOLID-Bare Copper		
	Nom. O.D. (mm)	0.550	Up	+0.005
Insulation	Material	HDPE		
	Diameter	0.95 ± 0.03mm		
Colour	A. White-Blue, Blue	B. White-Orange, Orange		
	C. White-Green, Green	D. White-Brown, Brown		
Rip-cord	Yes	Drain Wire	No	
Sheath	Thickness	0.55 ± 0.05mm		
	External O.D.	6.2 ± 0.4mm		
	Surface	Clean, Frap, Satiation		
	Material	PVC (Complies RoHS and CM (UL) rated)		
	Colour	White		
Sheath Physical Properties	Before Aging	Tensile Strength(Mpa) ≥13.5 / Elongation(%) ≥150		
	Aging Period (°C x hrs)	100°C x 24h x 7d		
	After Aging	Tensile Strength(Mpa) ≥12.5 / Elongation(%) ≥125		
	Cold Blend (-20 ± 2°Cx4h)	No visible cracks		
Electrical Characteristics (20°C)	1.0-250.0MHz, Characteristic impedance (Ω)	100 ± 15		
	1.0-250.0MHz, Delay Shew (ns/100m)	≤45		
	DC Resistance (Ω/100m) max	9.38		
	DC Conductor Resistance Unbalance (%)max	5.0		

**APPROVALS:**

- UL/cUL Listed
- ETL/3P Certified ANSI/TIA/EIA-568-C.2 Category 6 Testing Safety/Performance requirements.

**APPLICATIONS:**

- 1000BASE-Tx Gigabit Ethernet
- 10BASE-T, 100BASE-T Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN(IEEE802.12), 155/622 Mbps ATM
- 250MHz Broadband Video
- Voice, T1, ISDN

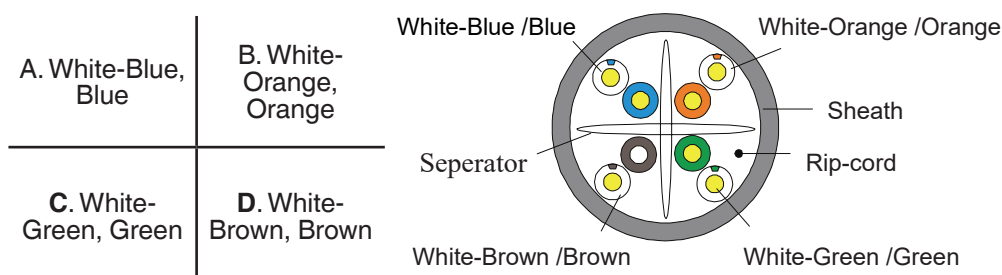
**ELECTRICAL PERFORMANCE:**

Freq (MHz)	PSNEXT ≥dB	ELFEXT ≥dB	PSELFEXT ≥dB
1	72.3	67.8	64.8
4	63.3	55.8	52.8
8	58.8	49.7	46.7
10	57.3	47.8	44.8
16	54.2	43.7	40.7
20	52.8	41.8	38.8
25	41.3	39.8	36.8
31.25	49.9	37.9	34.9
62.5	45.4	31.9	28.9
100	42.3	27.8	24.8
200	37.8	21.8	18.8
250	36.3	19.8	16.8

Freq (MHz)	RL ≥dB	ATT ≤dB	NEXT ≥dB	DELAY ≤ns
1	20.0	2.0	65.3	570.00
4	23.0	4.1	56.3	552.00
8	24.5	5.8	51.8	546.73
10	25.0	6.5	50.3	545.38
16	25.0	8.2	47.2	543.00
20	25.0	9.3	45.8	542.05
25	24.3	10.4	44.3	541.20
31.25	23.6	11.7	42.9	540.44
62.5	21.5	17.0	38.4	538.55
100	20.1	22.0	35.3	537.60
200	18.0	28.98	39.8	536.54
250	17.3	32.85	38.3	536.27

Values are for information only. The minimum NEXT coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula:  
 $NEXT(f \text{ MHz}) \geq NEXT(0.772) - 15 \log_{10}(f \text{ MHz} / 0.772)$

**CONFIGURATION:**



Although every precaution has been taken to ensure the accuracy of the product specifications at the time of publication, we cannot be responsible for the errors, omissions, or changes due to obsolescence. All data contained herein is subject to change without notice.