

# Category 6E 600MHz FTP Riser (CMR) Cable



Product Specification

Cable Detail			
Description			
23 AWG Shielded Twisted Pair, High-Performance Data Cable			
Applicable Standards			
<ul style="list-style-type: none"> <li>• ETL Listed CMR Type FTP</li> <li>• (ETL) listed FT4 FTP</li> <li>• ETL Verified to TIA - 568-C.2, and ISO/IEC 11801</li> <li>• RoHS Compliant</li> <li>• ATM 155 Mbps</li> <li>• Ethernet 10BASE-T, 100BASE-TX, 100BASE-VG, 100BASE-T4</li> <li>• 1000 Mbps 1000BASE-T Gigabit Ethernet™ (IEEE 802.3)</li> <li>• 16 Mbps Token Ring™ (IEEE 802.5)</li> </ul>			
Physical Characteristics			
Conductor Material	Solid Annealed Bare Copper		
Number of Conductor Pairs	4		
Size	23 AWG		
Stranding	Solid		
Insulation Material	Polyethylene		
Overall Diameter	0.045 in. ± 0.0002 in		
Average Thickness	0.0106 in		
Jacket Material	Flame Retardant PVC		
Average Wall Thickness	0.0236 in.		
Nominal Outer Diameter	0.2992 in. ± 0.008 in.		
Nominal Weight	38 lbs.		
Shield Material	Al Foil Shield		
Ripcord	Yes		
Mechanical Characteristics			
Temperature Rating	Installation	0°C to + 60°C	
	Operating	-20°C to + 75°C	
Tensile Strength	Before	≥ 13.8 Mpa	
Elongation	Aging	≥ 100%	
		100°C x 168 hours	
	After	≥ 85% of unaged	
Aging Condition	Aging	≥ 50% of unaged	
Insulation Colors			
Pair 1	White / Blue	Blue	
Pair 2	White / Orange	Orange	
Pair 3	White / Green	Green	
Pair 4	White / Brown	Brown	
Part Numbers	Jacket Color	Package	
C6-015XX	Black, Blue, Green, Grey, Red, White, Yellow	1000FT / Spool	

## Electrical Characteristics

Max. Conductor DC Resistance @ 20°C	9.38 Ω / 100 Meters
Maximum Conductor DC Resistance @ 20°C	≤ 9.38 Ω / 100 Meters
Maximum DC Resistance Unbalanced @ 20°C	≤ 5%
Max. Pair-to-Pair Ground Capacitance Unbalance	≤ 330 pF / 100 Meters
Characteristic Impedance (1 ~ 350 MHz)	≤ 100 ± 15 Ω
Mutual Capacitance	≤ 5.6 nF / 100 Meters
Max. Delay Skew	≤ 45 nS / 100 Meters

## Electrical Performance

Frequency (MHz)	Attenuation (dB/100m) Max.	Return loss (dB) Min.	NEXT (dB) Min.	PS-NEXT (dB) Min.
1	2.03	20.0	74.3	72.3
4	3.87	23.0	65.3	63.3
10	5.95	25.0	59.3	57.3
16	7.55	25.0	56.2	54.2
20	8.47	25.0	54.8	52.8
25	9.51	24.3	53.3	51.3
31.25	10.67	23.6	51.9	49.9
62.5	15.38	21.5	50.4	45.4
100	19.80	20.1	47.4	51.3
200	28.98	18.0	44.3	37.8
250	32.85	17.3	39.8	36.3
300	34.00	20.1	38.3	38.2
350	37.00	19.8	40.2	37.2
400	39.70	19.5	38.3	36.3
450	42.10	19.2	37.5	35.5
500	44.90	19.0	36.8	34.8
550	47.30	18.8	36.2	34.2
600	50.7	15.7	44.2	42.2
Frequency (MHz)	ELFEXT (dB/100m) Min.	PS-ELFEXT (dB) Min.	Delay (ns/100m) Max.	ACR (dB)
1	67.80	64.80	570.00	72.70
4	55.76	52.76	552.00	61.40
10	47.80	44.80	545.38	53.35
16	43.72	40.72	543.00	48.69
20	41.78	38.78	542.05	46.31
25	39.84	36.84	541.20	43.82
31.25	37.90	34.90	540.44	41.21
62.5	31.88	28.88	538.55	31.98
100	27.80	24.80	537.60	24.50
200	21.78	18.78	536.55	10.80
250	19.84	16.84	536.28	5.40
300	21.20	18.20	-	-
350	19.90	16.90	-	-
400	18.70	15.70	-	-
450	17.70	14.70	-	-
500	16.80	13.80	-	-
550	15.90	12.90	-	-
600	N/A	N/A	N/A	N/A

\* Values above 250MHz are information only.

## Cable Marking

CATEGORY 6E 600MHZ 23AWG 4 PR FTP XXXXXX CMR C(ETL)US ETL LISTED & VERIFIED TO TIA- 568-C.2 \*\*\*\*FT