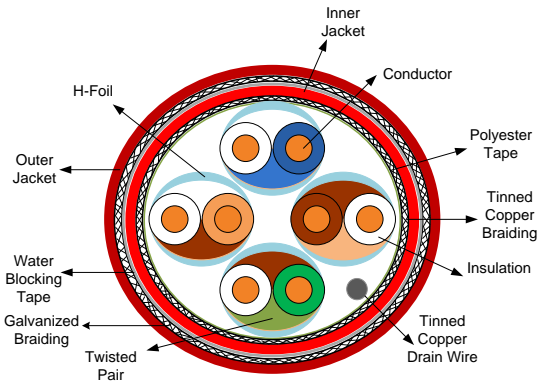


TECHNICAL SPECIFICATION



Applications:

- Horizontal Network and voice in structured Cabling system
- 10/100/1000 Base-T(IEEE 802.3)
- 155 Mbps ATM
- ANSI X3.263: 100 Mbps
- 4/16 Mbps Token Ring(IE802.3)
- 3D imaging
- 100 Mbps TP-PMD

Part Number	Item Number
V661272A	Mega Six, Category 6A SFTP, Armored

Conductor		
Composition (No./M)	1/0.57 ± 0.02 mm	
Material	Solid Bare Copper Wire	
Outside Diameter (mm)	0.57	
AWG (Solid)	23	
Center Cross Filler		
Material	--	
Wrapping and overall Screen		
H-Foil Tape	Thickness (mm)	0.065
Water Blocking Tape	Thickness (mm)	0.020
Inner Jacket / Sheath		
Material	LSZH-FR	
Thickness diameter (mm)	--	
Overall diameter (mm)	8.05	
Color	Red	
Armored		
Material	Galvanized Steel Wire	
Construction	24 / 5 / 0.32	
Picks/ Inches	9	
Percentage %	95	

Insulation	
Material	Solid Polyethylene
Thickness (mm)	0.365
Nominal Diameter (mm)	1.34 ± 0.05
Drain Wire	
Material	Tinned copper
Diameter (mm)	0.495 ± 0.008
Braiding	
Material	Tinned copper
Construction	24 / 7 / 0.16
Picks/ Inches	7
Percentage %	95
Outer Jacket / Sheath	
Material	LSZH-FR
Thickness diameter(mm)	--
Overall diameter (mm)	11.10 ± 0.30
Color	Red
Color Code	
Pair 1	Blue/White - Blue
Pair 2	Orange/ White - Orange
Pair 3	Green/ White - Green
Pair 4	Brown/ White - Brown

Technical Data – Electrical (SFTP Cable)			
Conductor resistance ($\Omega/100m$ @ 20°C)	Max.	9.50	
DC resistance unbalance (%)	Max.	4	
Pair to ground capacitance unbalanced (pF/100m)	Max.	1600	
Delay skew (ns/100m)	Max.	45	$4 \leq f \leq 500MHz$
Insertion Loss (dB / 100m)	Max.	$1.82*\sqrt{f}+0.0091*f +0.25/\sqrt{f}$	$4 \leq f \leq 500MHz$
Pair to Pair NEXT (dB/100m)	Min.	$75.3 - 15 \log (f)$	$4 \leq f \leq 500MHz$
Power Sum pair-pair NEXT (dB/100m)	Min.	$75.3 - 15 \log (f)$	$4 \leq f \leq 500MHz$
Values greater than 75 dB shall be converted to 75 dB			
ELFEXT (dB/ 100m)	Min.	$68 - 20*\log(f)$	$4 \leq f \leq 500MHz$
Values greater than 75 dB shall be converted to 75 dB			
PowerSum ELFEXT (dB / 100m)	Min.	$65 - 20*\log(f)$	$4 \leq f \leq 500MHz$
Values greater than 75 dB shall be converted to 75 dB			
Return Loss (dB)	Min.	$20 - 5*\log(f)$	$1 \leq f \leq 10MHz$
		25	$10 \leq f \leq 20MHz$
		$25 - 7*\log(f)$	$20 \leq f \leq 250MHz$
		17.3	$250 \leq f \leq 500MHz$
Propagation Delay (ns/100m)	Max.	$534 + 36 / \sqrt{f}$	$4 \leq f \leq 500MHz$
Input Impedance		Frequency (f)	(Ω)
		$100 \pm 15\%$	$1 \leq f \leq 250MHz$
		$100 \pm 22\%$	$250 \leq f \leq 500MHz$

Technical Data – Mechanical (Aamored)	
Tensile Strength (Kg/mm)	4.1
Breaking Load (Kg)	400 ↓
Bending Radius (mm)	111
Corrosion	No Oxidation
Cold Bend	-40°C NO CRACK

Electrical Performance (SFTP Cable)

Frequency (MHz)	In. Loss (dB/100m) Max.	Pair to Pair		Power sum		Return loss dB Max.	Delay Skew (Ns/100m) Min.	Po. Delay (Ns/100m) Max.
		NEXT (dB /100m) Min.	ELFEXT (dB/100m) Min.	NEXT (dB /100m) Min.	ELFEXT (dB /100m) Min.			
		1	-	-	-			
4	3.80	66.30	56.00	63.30	53.00	23.00	45.00	552.00
10	5.90	60.30	48.00	57.30	45.00	25.00	45.00	545.40
16	7.50	57.20	43.90	54.20	40.90	25.00	45.00	543.00
20	8.40	55.80	42.00	52.80	39.00	25.00	45.00	542.00
31.25	10.50	52.90	38.10	49.90	35.10	24.30	45.00	540.40
62.5	15.00	48.40	32.10	45.40	29.10	23.60	45.00	538.60
100	19.10	45.30	28.00	42.30	25.00	21.50	45.00	537.60
200	27.60	40.80	22.00	37.80	19.00	18.00	45.00	536.50
250	31.10	39.30	20.00	36.30	17.00	17.30	45.00	536.30
300	34.30	38.10	18.50	35.10	15.50	17.30	45.00	536.10
400	40.10	36.30	16.00	33.30	13.00	17.30	45.00	535.80
500	45.30	34.80	14.00	31.80	11.00	17.30	45.00	535.60

Technical Data – Physical (SFTP Cable)

Flame retardant test	IEC 60332(Level C)	
Cold bend test	- 20 ± 2° X 4hrs, no crack	
Dielectric strength	AC 1.7 KV for 2 S	
Insulation	Before Aging	After Aging
Min. tension strength (psi)	1300	75% before aging (100°C X 48hr)
Min. elongation(%)	300	75% before aging (100°C X 48hr)
Jacket	Before Aging	After Aging
Min. tension strength (psi)	1300	85% before aging (100°C X 168hr)
Min. elongation(%)	100	50% before aging (100°C X168hr)
Min. bending radius (mm)	55	
Max. puling tension (N)	25	
Installation temperature	-10° to +60°	
Operating temperature	-10° to +60°	

Version 2, H.N.S , 29 July 2014