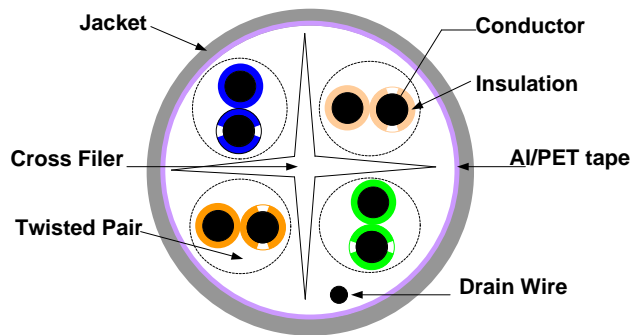


## TECHNICAL SPECIFICATION



### Applications:

- Digital Video
- Broadband and Baseband analog video
- IEEE 802.3: 1000BASE-T (Gigabit Ethernet), 100BASE-TX, 10BASE-T
- ANSI/TIA/EIA-584: 1000BASE-TX
- 155 Mbps, 1.2 Gbps ATM
- ANSI X3.263:100Mbps
- IEEE 802.3af DTE Power(POE)
- 4/16 Mbps Token Ring

Part Number	Description
V621081	Mega Six, Category 6 FTP

Conductor	
Composition (No./M)	1/0.57 ± 0.02 mm
Material	Annealed Copper Wire
Outside Diameter (mm)	0.57
AWG (Solid)	23
Center Cross Filler	
Material	Solid PE Cross Filler
Wrapping and overall Screen	
PET tape	Thickness (mm) 0.023
AL/ PET tape	Thickness (mm) 0.025
Jacket/Sheath	
Material	PVC
Thickness diameter (mm)	0.47
Overall Diameter (mm)	7.6 ± 0.3 mm
Color	Gray

Insulation	
Material	Solid Polyethylene
Thickness	-
Nominal Diameter (mm)	1.1 ± 0.02
Drain wire	
Material	Tinned copper
Diameter (mm)	0.495
Braiding	
Material	-
Percentage	-
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		
Max. Conductor resistance ( $\Omega/\text{km}$ @ 20°C)	93.80	
Max. DC resistance unbalance (Individual Pair , %)	5	
Max. Mutual capacitance (pF/m)	56	
Max. Delay skew (ns/100m)	45	
Nominal VOP(Velocity of Propagation % speed of light)	68	
Input Impedance	Frequency (f)	( $\Omega$ )
	$1 \leq f \leq 100$	$100 \pm 15$
	$100 < f \leq 250$	$100 \pm 22$

Electrical Performance								
Frequency (MHz)	Attenuation Max.	Pair to Pair			Power sum			Return loss Min. (dB)
		NEXT Min. (dB)	ELFEXT Min.(dB)	ACR Min.(dB)	NEXT Min.(dB)	ELFEXT Min.(dB)	ACR Min.(dB)	
1	2.0	74.3	67.8	72.3	72.3	64.8	70.3	20.0
4	3.8	65.3	55.7	61.5	63.3	52.7	59.5	23.0
10	6.0	59.3	47.8	55.3	57.3	44.8	51.3	25.0
16	7.6	56.3	43.7	48.7	54.3	40.7	46.7	25.0
20	8.5	54.8	41.7	46.3	52.8	38.7	44.3	25.0
31.25	10.7	51.9	37.9	41.2	49.9	34.9	39.2	23.6
62.5	15.4	47.4	31.8	32.0	45.1	28.8	30.0	21.5
100	19.8	44.3	27.8	24.5	42.3	24.8	22.5	20.1
125	22.4	42.8	25.9	20.5	40.8	22.9	18.5	19.4
155	25.1	41.5	23.9	16.4	39.5	20.9	14.4	18.8
175	26.9	40.7	22.9	13.7	38.7	20.0	11.7	18.4
200	29.0	39.8	21.7	10.8	37.8	18.7	8.8	18.0
250	32.8	38.3	19.8	5.5	36.3	16.8	3.5	17.3

Technical Data - Physical		
Temperature rating & voltage	60° , 300V	
Flame retardant test	IEC 332-1	
Insulation shrink back	150mm, 121 ± 1° X 1 hr 9.5 mm	
Cold bend test	- 20 ± 2° X 4hrs, no crack	
Dielectric strength	AC 1.5 KV/min.	
Insulation	<b>Before Aging</b>	<b>After Aging</b>
Min. tension strength (psi)	1200	75% before aging (100° 48hr)
Min. elongation(%)	100	75% before aging (100° 48hr)
Jacket	<b>Before Aging</b>	<b>After Aging</b>
Min. tension strength (psi)	2000	85% before aging (100° 240hr)
Min. elongation(%)	100	50% before aging (100° 240hr)
Min. bending radius (mm)	55	
Max. puling tension (N)	110	
Installation temperature	0° to +50°	
Operating temperature	-10° to +60°	