

Product Specification

STANDARD COMPLIANCES

All Proposed Category 6 requirements as per ANSI/TIA, ISO/IEC, and CENELEC EN Standards:
ANSI/TIA-568-C.2 Cat.6

ISO/IEC 2nd Edition 11801 Class E

CENELEC EN 50173-1, IEC 61156-6, CENELEC EN 50288-5-2 for Patch Cable

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

Conductor	Material / Size	Bare Copper / 26AWG
Insulation	Material	Foam-Skin PE
	Thickness	Nominal: 0.27 mm
	Diameter	Nominal: 1.08 mm
	Colors	Blue/White Orange/White
		Green/White Brown/White
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min. 0.816 Kgf/mm ²
Screen	Material	Aluminum-Mylar tape and tinned copper braid
Jacket	Material	LSOH
	Thickness	Nominal: 0.5 mm
	Diameter	Nominal: 5.7 mm
	Color	Assorted upon request
	Unaged Elongation	Min. 125%
	Unaged Tensile Strength	Min. 0.917 Kgf/mm ²
	Aging at 100°C for 168Hrs	Min. elongation retention:75%
		Min. tensile strength retention:70%
Marking		CAT.6 SSTP LSOH 26AWGX4P PATCH 3P VERIFIED TO ANSI/TIA-568-C.2 & ISO/IEC 11801 ED.2 & EN 50288-5-2 & IEC 60332-1-2 or as customer request.

APPROVALS

3P Certified ANSI/TIA-568-C.2 Category 6 Testing Performance requirements.



APPLICATIONS

1000BASE-TX Gigabit Ethernet
10BASE-T, 100BASE-TX Fast Ethernet (IEEE 802.3)
100 VG – AnyLAN (IEEE802.12), 155/622 Mbps ATM

550MHz Broadband Video
Voice, T1, ISDN

ELECTRICAL PERFORMANCES

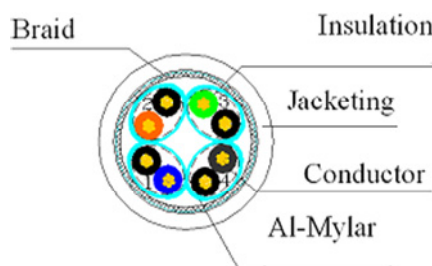
Dielectric Strength of Insulation		1500 V dc / 2 seconds		
Insulation Resistance Test		Min. 5000 MΩ·Km		
Conductor Resistance		Max. 9.38 Ω/100m at 20°C		
Resistance Unbalance		Max. 2%		
Capacitance Unbalance		Max. 160 pF/100m		
Mutual Capacitance		Max. 5600 pF/100m		
Impedance	772kHz	125Ω ± 20%		
	1~250MHz	100Ω ± 15%		
Attenuation & Near End Cross Talk	Frequency (MHz)	Max. Attenuation (dB/100 meters)	NEXT (dB), Min.	PSNEXT (dB), Min.
	1 MHz	2.4*	74.3*	72.3*
	4 MHz	4.5*	65.3*	63.3*
	10 MHz	7.1*	59.3*	57.3*
	16 MHz	9.7*	56.2*	54.2*
	20 MHz	10.2*	54.8*	52.8*
	31.25 MHz	12.8*	51.9*	49.9*
	62.5 MHz	18.5*	47.4*	45.4*
	100 MHz	23.8*	44.3*	42.3*
	150 MHz	29.7*	41.4*	39.4*
	200MHz	34.8*	39.8*	37.8*
	250MHz	39.4*	38.3*	36.3*

The asterisked (*) value 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:

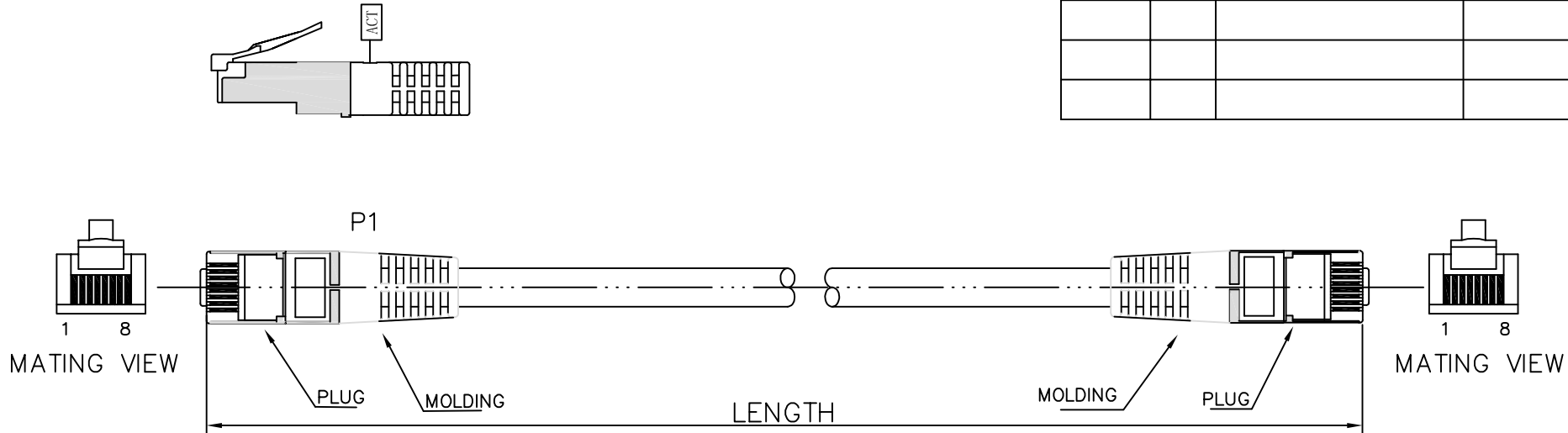
$$NEXT(f \text{ MHz}) \geq NEXT(0.772) - 15 \log_{10}(f \text{ MHz} / 0.772) \text{ dB}$$

CONFIGURATION

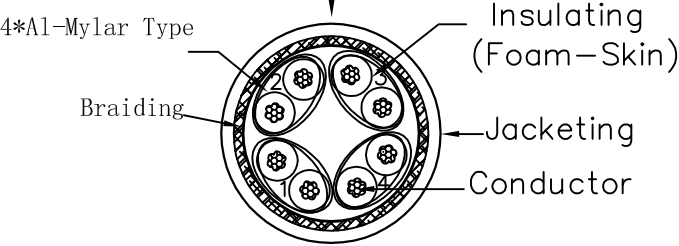
orange white	2	green white	3
blue white	1	brown white	4



DATE	REV	DESCRIPTION	BY	CHKD



Marking: <LP438> ACT SSTP CATEGORY 6 PIMF PATCHCABLE 4X2XAWG#26 LSZH ISO/IEC 11801 ED.2 EN 50288
TIA/EIA-568-B.2-1 IEC 60332-1 3P VERIFIED FOR GIGABIT ETHERNET LEADFREE EN71 15000.001

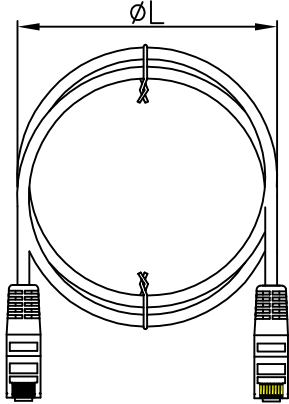


orange 1 white/orange	green 2 white/green
blue 3 white/blue	brown 4 white/brown

PA/R	PINOUT		
	P1(T568B)	WIRE	P2(T568B)
1	1	WHT/ORG	1
	2	ORG	2
2	3	WHT/GRN	3
	6	GRN	6
3	4	BLU	4
	5	WHT/BLU	5
4	7	WHT/BRN	7
	8	BRN	8

Conductor	Bare Copper 26AWG 7/0.152±0.005mm
Insulation	Thickness:MIN at any point:0.2mm MAX AVG:0.35mm Diameter:1.05±0.05mm
Jacketing	LSZH Thickness:MIN at any point:0.50mm MAX AVG:0.60mm Diameter:6.1±0.2mm

WIRE	CAT.6 SSTP LSZH STR 26AWG*4P
PLUG	YUS-06
Length	XXM
COLOR	GRAY852



RoHS Compliant

Unless specified on the drawing, tolerances are per the follows:
.X ± 1
.X ± 0.2
.XX ± 0.05



DRAW.NO	LSZH FB9xxx	ITEM	PATCH CORD CATEGORY 6 PIMF		
DEPARTMENT	R&D	DRAW	ZhaoyangWu	DATE	2008/4/8
SCALE		CHECKER		APPROVAL	
UNIT	MM	SHEET	1	OF	1

DATE	REV	DESCRIPTION	BY	CHKD

WIRE	CAT. 6 SSTP LSZH STR 26AWG*4P	
PLUG	RJ45 8P8C	
Plating on contacts	50U"	
MIN bending radius	50mm	
Band with	250MHz	
nvp	72%	
Standars	ISO/IEC 11801 & EN 50173-1	
Impedance	100 Ω ±15%	
Skew	<=45ns 100m AT:20° C	
Capacity	Max 5600pf/100m	
Jacket	LSZH	Thickness:MIN at any point:0.50mm MAX AVG:0.60mm Diameter:6.1±0.2mm
Insulation		Thickness:MIN at any point:0.2mm MAX AVG:0.35mm Diameter:1.05±0.05mm
Conductor	Bare Copper 26AWG 7/0.152±0.005mm	
color	Assorted upon request	

PART	COLOR	RAL NR (LEADFREE)
FB9000	GRAY852	GREY PANTONE COOL GRAY 8C
FB9500	RED215	RED PANTONE 201C
FB9600	BLUE632	BLUE PANTONE 292C
FB9700	GREEN520	GREEN PANTONE 342C
FB9800	YELLOW419	YELLOW PANTONE 110C
FB9900	BLACK012	BLACK PANTONE BLACK C



Unless specified on the drawing, tolerances are per the follows: . ± 1 .X ± 0.2 .XX ± 0.05	
3RD	

DRAW.NO	LSZH FB9xxx	ITEM	PATCH CORD CATEGORY 6 PIMF		
DEPARTMENT	R&D	DRAW	ZhaoyangWu	DATE	2008/4/9
SCALE		CHECKER		DATE	
UNIT	MM	APPROVAL		DATE	