Detailed Specifications & Technical Data



1533P Paired - Category 5e Unbonded-Pair Cable



Description:

24 AWG solid bare copper conductors, plenum, FEP Teflon® insulation, twisted pairs, overall Beldfoil® shield, drain wire, RG-45 compatible, see color code chart (below), Flamarrest® jacket (red, orange, yellow, green, blue, gray or natural).

SUITABLE APPLICATIONS:

Suitable Applications	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU,
	Digital Video, RS-422, Noisy Environments, 100MHz Category 5e

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	24
Stranding	Solid
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material

FEP - Fluorinated Ethylene Propylene

Pair Color Code Chart :

Number	imber Color		Color
1	White/Blue Stripe & Blue	3	White/Green Stripe & Green
2	White/Orange Stripe & Orange	4	White/Brown Stripe & Brown

OUTER SHIELD:

Outer Shield Material Trade Name	Beldfoil®
Outer Shield Type	Таре
Outer Shield Material	Aluminum Foil-Polyester Tape
Outer Shield %Coverage	100 %
OUTER SHIELD DRAIN WIRE :	
Outer Shield Drain Wire AWG	24
Outer Shield Drain Wire Stranding	7x32
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper Page 1 of 4

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OUTER JACKET:	
Outer Jacket Material Trade Name	Flamarrest®
Outer Jacket Material	LS PVC - Low Smoke Polyvinyl Chloride
OVERALL NOMINAL DIAMETER:	
Overall Nominal Diameter	.235 in.
MECHANICAL CHARACTERISTICS:	
Operating Temperature Range	0°C To +75°C
Bulk Cable Weight	34 lbs/1000 ft.
Max. Recommended Pulling Tension	25 lbs.
Min. Bend Radius (Install)	1 in.
APPLICABLE SPECIFICATIONS AND AGENCY	Y COMPLIANCE:
APPLICABLE STANDARDS:	
NEC/(UL) Specification	CMP, UL444
CEC/C(UL) Specification	CMP
IEC Specification	11801 Category 5
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005
TIA/EIA Specification	568-B.2 Category 5e
Other Specification	NEMA WC-63.1 Category 5e, UL Verified to Category 5e
FLAME TEST:	
UL Flame Test	NFPA 262
CSA Flame Test	FT6
PLENUM/NON-PLENUM:	
Plenum (Y/N)	Y
Non-Plenum Number	1533R
ELECTRICAL CHARACTERISTICS:	
Nom. Mutual Capacitance @ 1 KHz	15 pF/ft
Maximum Capacitance Unbalance (pF/100 m)	330 pF/100 m
Nominal Velocity of Propagation	70 %
Maximum Delay (ns/100 m)	538 @ 100MHz ns/100 m
Maximum Delay Skew (ns/100m)	45 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C	9.38 Ohms/100 m
Maximum DCR Unbalance @ 20 Deg. C	3 %
Max. Operating Voltage - UL	300 V RMS

ELECTRICAL CHARACTERISTICS - PREMISE:



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Premise Cable Electricals Table 1 :							
Frequency (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min. Return Loss (dB)	Min. Structural Return Loss (dB)
1	2.0	65.3	62.3	60.3	60.3	20.0	23.0
4	4.1	56.3	53.3	49.2	49.2	23.0	23.0
8	5.8	51.8	48.8	43.0	43.0	24.5	24.5
10	6.5	50.3	47.3	40.8	40.8	25.0	25.0
16	8.2	47.3	44.3	36.0	36.0	25.0	25.0
20	9.3	45.8	42.8	33.5	33.5	25.0	25.0
25	10.4	44.3	41.3	30.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	28.2	28.2	23.6	23.6
62.5	17.0	38.4	35.4	18.4	18.4	21.5	21.5
100	22.0	35.3	32.3	10.3	10.3	20.1	20.1

Premise Cable Electricals Table 2 :

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8

NOTES:

Notes

Shield is bonded to jacket inner wall for electrical stability. RJ-45 Compatible. Jacket sequentially marked at 2 ft. intervals. Third party verfied to TIA/EIA-568-B.2, Category 5e.

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
1533P 0021000	4 PR #24 FEP FS FLRST	1000	35	RED	С
1533P 002A1000	4 PR #24 FEP FS FLRST	A1000	38	RED	
1533P 0031000	4 PR #24 FEP FS FLRST	1000	35	ORANGE	С
1533P 003A1000	4 PR #24 FEP FS FLRST	A1000	38	ORANGE	
1533P 0041000	4 PR #24 FEP FS FLRST	1000	35	YELLOW	С
1533P 004A1000	4 PR #24 FEP FS FLRST	A1000	38	YELLOW	
1533P 0051000	4 PR #24 FEP FS FLRST	1000	35	GREEN, DARK	С



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1533P 005A1000	4 PR #24 FEP FS FLRST	A1000	38	GREEN, DARK	
1533P 0081000	4 PR #24 FEP FS FLRST	1000	35	GRAY	С
1533P 008A1000	4 PR #24 FEP FS FLRST	A1000	38	GRAY	
1533P 0101000	4 PR #24 FEP FS FLRST	1000	35	BLACK	С
1533P 010A1000	4 PR #24 FEP FS FLRST	A1000	38	BLACK	
1533P 8771000	4 PR #24 FEP FS FLRST	1000	35	NATURAL	С
1533P 877A1000	4 PR #24 FEP FS FLRST	A1000	38	NATURAL	
1533P D151000	4 PR #24 FEP FS FLRST	1000	35	BLUE	С
1533P D15A1000	4 PR #24 FEP FS FLRST	A1000	38	BLUE	

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 02-21-2006

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