Detailed Specifications & Technical Data



1633ESB Paired - LAN, Networking, Data Cable



Description:

24 AWG solid bare copper conductors, polypropylene insulation, overall Beldfoil® shield (100% coverage) plus a tinned copper braid shield (40% coverage), 26 AWG solid tinned copper drain wire, low smoke zero halogen jacket.

SUITABLE APPLICATIONS:

Shipboard LAN/Data, WI-FI, Wireless LAN, Outdoor Antenna, Radio, Broadband, RF, Where ABS Type Approval is Required

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	24
Stranding	Solid
Conductor Material	BC - Bare Copper
INSULATION:	
Insulation Material	PP - Polypropylene
Nom. Insulation Wall Thickness	.011 in.

Pair Color Code Chart :

Insulation Diameter

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

.043 in.

OUTER SHIELD:

Outer Shield Material Trade	Name	Beldfoil®		
Outer Shield Type		Tape/Braid		
Outer Shield Material :				
Layer Number	Material Trade Name	Туре	Material	% Coverage (%)
Layer Number 1	Material Trade Name Beldfoil®	TypeTape	Material Aluminum Foil/Polyester Tape	% Coverage (%) 100



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Outer Shield %Coverage	100 %
OUTER SHIELD DRAIN WIRE :	
Outer Shield Drain Wire AWG	26
Outer Shield Drain Wire Stranding	Solid
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper
OUTER JACKET:	
Outer Jacket Material	LSZH - Low Smoke Zero Halogen
OVERALL NOMINAL DIAMETER:	
Overall Nominal Diameter	.248 in.
MECHANICAL CHARACTERISTICS:	
Operating Temperature Range	-30°C To +105°C
Bulk Cable Weight	35 lbs/1000 ft.
Max. Recommended Pulling Tension	18 lbs.
Min. Bend Radius (Install)	2 in.
APPLICABLE SPECIFICATIONS AND AGENC	Y COMPLIANCE:
APPLICABLE STANDARDS:	
NEC/(UL) Specification	CMG-LS
CEC/C(UL) Specification	CMG-LS
IEEE Specification	Std. 45 clause 23
IEC Specification	11801 Category 5, 60092-376 clause 17, 60092-351, 60754-1, 60754-2, 61034
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	08/01/2006
TIA/EIA Specification	568-B.2 Category 5e
Other Specification	NEMA WC-63.1 Category 5e, UL 444
FLAME TEST:	
UL Flame Test	UL1685 FT4 Loading, Limited Smoke
CSA Flame Test	FT4, Limited Smoke
IEC Flame Test	60332-3-22 (Category A), 60332-1
IEEE Flame Test	1202
SUITABILITY:	
Suitability - Indoor	Yes
Suitability - Outdoor	Yes
Sunlight Resistance	Yes
PLENUM/NON-PLENUM:	
Plenum (Y/N)	Ν

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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:

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							
4	4.1	56.3	53.3		49	23.0	23.0
8							
10	6.5	50.3	47.3		41	25.0	25.0
16	8.3	47.3	44.3		36	25.0	25.0
20	9.3	45.8	42.5		33	20.0	25.0
25							
31.2	11.7	42.9	39.9		28	23.6	23.6
62.5	17.0	41.4	38.4		21	21.5	21.5
100	22.0	35.3	32.3		10	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		
4	100 ± 15	100 ± 15		49
8				
10	100 ± 15	100 ± 15		41
16	100 ± 15	100 ± 15		36
20	100 ± 15	100 ± 15		33
25				
31.2	100 ± 15	100 ± 15		28
62.5	100 ± 15	100 ± 15		21
100	100 ± 15	100 ± 15		10

NOTES:

Notes

RJ-45 Compatible. Jacket sequentially marked at 1 meter intervals.

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes



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1633ESB 0101000	4 PR #24 PP SH FRNC	1000	45	BLACK	С
1633ESB E4X1000	4 PR #24 PP SH FRNC	1000	45	GRAY, LIGHT DEC	С
1633ESB E4X1640	4 PR #24 PP SH FRNC	1640	0	GRAY, LIGHT DEC	
1633ESB E4X3280	4 PR #24 PP SH FRNC	3280	0	GRAY, LIGHT DEC	

C = CRATE REEL PUT-UP.

Revision Date: 04-17-2007 **Revision Number: 0**

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