

2413 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cables



For more Information
please call

1-800-Belden1



Description:

23 AWG Solid Bare Copper Conductors, Dual FRPO/FEP Insulation, Tape Separator, Ripcord, Flamarrrest® Jacket.

Usage (Overall)

Suitable Applications: Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 250MHz Category 6

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	23	Solid	BC - Bare Copper

Insulation

Insulation Material:

Insulation Material
FRPO/FEP - Flame Retardant Polyolefin/Fluorinated Ethylene Propylene

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.225

Outer Jacket Ripcord: Yes

Overall Cable

Overall Cabling Separator Material: Dielectric Tape

Overall Nominal Diameter: 0.225 in.

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

Storage Temperature Range: -20°C To +75°C

Installation Temperature Range: +5°C To +50°C

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Operating Temperature Range:	0°C To +75°C
Bulk Cable Weight:	27 lbs/1000 ft.
Max. Recommended Pulling Tension:	40 lbs.
Min. Bend Radius (Install)/Minor Axis:	1 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
Other Standards:	ISO/IEC 11801 ed 2.1 (2008) Class E
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/13/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 6 - TIA 568.C.2
Other Specification:	Third party verified to Category 6

Applicable Patents:

Country	Patent
US	5563377
US	6570095
US	6998537
US	7179999
CANADA	2144694
US	7977575

Flame Test

UL Flame Test:	NFPA 262 Plenum Flame Test (UL910)(FT6)
C(UL) Flame Test:	FT6
CSA Flame Test:	FT6

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	2412

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance:

Capacitance (pF/ft)
330.000

Maximum Capacitance Unbalance (pF/100 m):	330
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Nominal Velocity of Propagation:

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VP (%)

72

Maximum Delay:

Delay (ns/100 m)

537 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

8.2

Max. Operating Voltage - UL:

Voltage

300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

5

Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
0.772	1.800	77.0	75.0	75.2	73.2	
1	2.000	75.3	73.3	73.3	71.3	20.000
4	3.700	66.3	64.3	62.6	60.6	23.000
8	5.200	63.3	61.3	58.1	56.1	24.500
10	5.800	61.8	59.8	56.0	54.0	25.000
16	7.400	58.6	56.6	51.2	49.2	25.000
20	8.300	57.1	55.1	48.8	46.8	25.000
25	9.300	55.5	53.5	46.3	44.3	24.300
31.25	10.400	54.0	52.0	43.6	41.6	23.600
62.5	15.000	49.1	47.1	34.1	32.1	21.500
100	19.300	45.8	43.8	26.5	24.5	20.800
155	24.500	42.7	40.7	18.2	16.2	19.500
200	28.300	40.9	38.9	12.6	10.6	18.700
250	32.100	39.3	37.3	7.2	5.2	18.000
300	35.600	38.1	36.1	2.5	-0.5	17.500
350	38.900	37.1	35.1	-1.7	-3.7	17.000
400	42.000	36.3	34.3	-5.7	-7.7	16.600
450	45.000	35.5	33.5	-9.5	-11.5	16.200
500	47.900	34.8	32.8	-13.0	-15.0	15.900
550	50.600	34.2	32.2	-16.4	-18.4	15.600

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
0.772	100 ± 15	102 ± 15	73.0	70.0
1	100 ± 15	100 ± 15	70.8	67.8
4	100 ± 15	100 ± 15	58.8	55.8
8	100 ± 15	100 ± 15	52.7	49.7
10	100 ± 15	100 ± 15	50.8	47.8
16	100 ± 15	100 ± 15	46.7	43.7
20	100 ± 15	100 ± 15	44.8	41.8
25	100 ± 15	100 ± 15	42.8	39.8
31.25	100 ± 15	100 ± 15	40.9	37.9
62.5	100 ± 15	100 ± 15	34.9	31.9
100	100 ± 15	100 ± 15	30.8	27.8
155	100 ± 22	100 ± 15	27.0	24.0
200	100 ± 22	100 ± 15	24.8	21.8
250	100 ± 32	100 ± 15	22.8	19.8

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300	100 ± 32	100 ± 15	21.3	18.3
350			19.9	16.9
400			18.8	15.8
450			17.7	14.7
500			16.8	13.8
550			16.0	13.0

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft./1m intervals. Third party verified to ANSI/TIA-568-C.2, Category 6. Values above 300 MHz are for Engineering Information Only.

Reference (Overall)

Previous Part Number: 24567415, 24567715, 24567736T, 24567615T, 25067545, 25067545T, 25067515T, 24567745T, 24567715T, 25067845, 25067845T, 25067836, 25067836T, 24567815, 24567815T, 2456705T, 24567145, 24567145T, 24567115, 24567115T, 24567345, 24567345T, 24567336, 24567336T, 24567315, 24567315T, 24567445T, 24567436, 24567436T, 24567415T, 24567A15T, 24567945, 24567945T, 24567936T, 24567915, 24567915T

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
2413 D15A1000	1,000 FT	31.000 LB	BLUE		CAT6+ 4PR U/UTP CMP RIB
2413 D15U1000	1,000 FT	29.000 IN	BLUE		CAT6+ 4PR U/UTP CMP BOX
2413 D151000	1,000 FT	28.000 LB	BLUE		CAT6+ 4PR U/UTP CMP REEL
2413 D152500	2,500 FT	67.500 LB	BLUE		CAT6+ 4PR U/UTP CMP REEL
2413 003A1000	1,000 FT	34.000 LB	ORANGE		CAT6+ 4PR U/UTP CMP RIB
2413 0031000	1,000 FT	32.000 LB	ORANGE		CAT6+ 4PR U/UTP CMP REEL
2413 004A1000	1,000 FT	34.000 LB	YELLOW		CAT6+ 4PR U/UTP CMP RIB
2413 0041000	1,000 FT	32.000 LB	YELLOW		CAT6+ 4PR U/UTP CMP REEL
2413 0042500	2,500 FT	75.000 LB	YELLOW		CAT6+ 4PR U/UTP CMP REEL
2413 005A1000	1,000 FT	34.000 FT	GREEN, DARK		CAT6+ 4PR U/UTP CMP RIB
2413 0052500	2,500 FT	75.000 LB	GREEN, DARK		CAT6+ 4PR U/UTP CMP REEL
2413 007A1000	1,000 FT	34.000 FT	VIOLET		CAT6+ 4PR U/UTP CMP RIB
2413 008A1000	1,000 FT	34.000 LB	GRAY		CAT6+ 4PR U/UTP CMP RIB
2413 008U1000	1,000 FT	28.000 IN	GRAY		CAT6+ 4PR U/UTP CMP BOX
2413 0081000	1,000 FT	32.000 LB	GRAY		CAT6+ 4PR U/UTP CMP REEL
2413 009A1000	1,000 FT	34.000 LB	WHITE		CAT6+ 4PR U/UTP CMP RIB
2413 009U1000	1,000 FT	28.000 IN	WHITE		CAT6+ 4PR U/UTP CMP BOX
2413 0091000	1,000 FT	32.000 LB	WHITE		CAT6+ 4PR U/UTP CMP REEL
2413 0092500	2,500 FT	75.000 LB	WHITE		CAT6+ 4PR U/UTP CMP REEL
2413 010A1000	1,000 FT	34.000 FT	BLACK		CAT6+ 4PR U/UTP CMP RIB
2413 0102500	2,500 FT	75.000 LB	BLACK		CAT6+ 4PR U/UTP CMP REEL
2413 012A1000	1,000 FT	34.000 LB	PINK		CAT6+ 4PR U/UTP CMP RIB

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