



Part Number: 1227A1

CAT3 Horizontal, 2pr, UTP, PVC Jkt, CMR

Product Description

CAT3 (16MHz), 2-Pair, U/UTP-unshielded, Riser-CMR, Premise Horizontal cable, 24 AWG solid bare copper conductors, polyolefin insulation, PVC jacket

Technical Specifications

Product Overview

Environmental Space:	Riser
Suitable Applications:	802.3 10BaseT, 100BaseT4

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Copper	2

Conductor Count:	4
Total Number of Pairs:	2
Conductor Size:	24 AWG

Insulation

Material	
PP - Polypropylene	
Bonded-Pair:	N/A

Color Chart

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange

Outer Jacket Material

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.173 in	No

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance	Nominal Conductor DCR
93.8 Ohm/km	5 %	28 Ohm/1000ft

Capacitance

Max. Capacitance Unbalance	Nom. Mutual Capacitance
330 pF/100m	15 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
16 MHz	543 ns/100m	45 ns/100m	1.5 ns/ft	70 %

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. SRL (Structural Return Loss)	Max./Min. Fitted Impedance
1 MHz	2.6 dB/100m	41.0 dB	12.0 dB	100 ± 15 Ohm
4 MHz	5.6 dB/100m	32.0 dB	12.0 dB	100 ± 15 Ohm
8 MHz	8.5 dB/100m	27.0 dB	12.0 dB	100 ± 15 Ohm
10 MHz	9.7 dB/100m	26.0 dB	12.0 dB	100 ± 15 Ohm
16 MHz	13.1 dB/100m	23.0 dB	10.0 dB	100 ± 15 Ohm

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temp Range:	0°C To +50°C
UL Temp Rating:	75°C
Storage Temp Range:	-20°C To +75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	12 lbs/1000ft
Max Recommended Pulling Tension:	15 lbs
Min Bend Radius/Minor Axis:	1.0 in
Min Bend Radius/Installation:	1.75 in

Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
CPR Euroclass:	Eca
Data Category:	Category 3
ANSI Compliance:	S-90-661-2012 Category 3, ANSI/NEMA WC-63.1 Category 3
Telecommunications Standards:	ANSI/TIA-568-C.2 Category 3
Third Party Performance Verification:	Category 3

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	No
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL 1666 Riser
ISO/IEC Flammability:	60332-1
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1243A2

Part Number

Variants

Item #	Color
1227A1 008U1000	Gray
1227A1 Q5HU1000	White

Patent:	https://www.belden.com/resources/patents
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Product Notes

Notes:	Print Includes Descending Footage Markings.
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