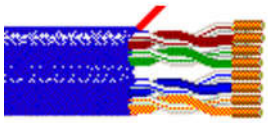
Product: 7989R



Low Skew, Category 6, 4-24 AWG pairs, CMR

Product Description

Category 6, 23 AWG bonded pairs solid bare copper conductors, non-plenum, polyolefin insulation, skew 10.0ns/100m nominal, rip cord, PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	Category 6, UTP Based Video Applications, and KVM

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
23	Solid	BC - Bare Copper	4

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material
PO - Polyolefin

Bonded-Pair:	N/A

Color Chart

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

Outer Shield

Material
No Shield

Outer Jacket

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.365 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
90 Ohm/km	3 %

Capacitance

Max. Capacitance Unbalance	Nom.Mutual Capacitance
49.2	15 pF/ft

Delay

Nominal Velocity of Propagation (VP) [%]	Typical Delay Skew
70%	0.03 ns/100m

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted)
1 MHz	2 dB/100m	74.3 dB	72.3 dB	70.3 dB	67.8 dB	64.8 dB	20 dB	100 ± 15
4 MHz	3.8 dB/100m	65.3 dB	63.3 dB	59.5 dB	55.7 dB	52.7 dB	23 dB	100 ± 15
8 MHz	5.3 dB/100m	60.8 dB	58.8 dB	53.4 dB	49.7 dB	46.7 dB	24.5 dB	100 ± 15
10 MHz	6 dB/100m	59.3 dB	57.3 dB	51.3 dB	47.8 dB	44.8 dB	25 dB	100 ± 15
16 MHz	7.6 dB/100m	56.3 dB	54.3 dB	46.7 dB	43.7 dB	40.7 dB	25 dB	100 ± 15
20 MHz	8.5 dB/100m	54.8 dB	52.8 dB	44.3 dB	41.7 dB	38.7 dB	25 dB	100 ± 15
25 MHz	9.5 dB/100m	53.4 dB	51.4 dB	41.8 dB	39.8 dB	36.8 dB	24.3 dB	100 ± 15
31.25 MHz	10.7 dB/100m	51.9 dB	49.9 dB	39.2 dB	37.9 dB	34.9 dB	23.6 dB	100 ± 15
62.5 MHz	15.4 dB/100m	47.4 dB	45.4 dB	30 dB	31.8 dB	28.8 dB	21.5 dB	100 ± 15
100 MHz	19.8 dB/100m	44.3 dB	42.3 dB	22.5 dB	27.8 dB	24.8 dB	20.1 dB	100 ± 15
155 MHz	25.2 dB/100m	41.5 dB	39.5 dB	14.3 dB	23.9 dB	20.9 dB	18.8 dB	100 ± 22
200 MHz	29 dB/100m	39.8 dB	37.8 dB	8.8 dB	21.8 dB	18.7 dB	18 dB	100 ± 22
250 MHz	32.8 dB/100m	38.3 dB	36.3 dB	3.5 dB	19.8 dB	16.8 dB	17.3 dB	100 ± 32

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	29 lbs/1000ft
Max. Pull Tension:	50 lbs
Min. Bend Radius/Minor Axis:	1.75 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMG
CPR Euroclass:	Eca

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Riser
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
MII Order #39 (China RoHS):	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	7989P

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
7989R 0131000	Blue, Dark	Reel	1,000 ft	612825192602

Footnote:	C - CRATE REEL PUT-UP.

Product Notes

Notes:	US Patent #'s 5, 606, 151; 5, 734, 126.

History

Update and Revision:	Revision Number: 0.411 Revision Date: 12-12-2023

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