Product: 2L28026

Flat Gray Ribbon Cable 1mm Pitch, 2L280XX Series, #28-26c, PVC Ins

Product Description

Flat Gray Ribbon Cable 1.00mm Pitch, 2L280XX Series, 26 Conductor, 28 AWG (7x36) Tinned Copper, PVC Insulation

Technical Specifications

Product Overview

Suitable Applications:	Internal interconnection, internal wiring of electronic equipment, designed for the disk drive market where the 2.00mm IDC connector is widely used

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material
28	7x36	TC - Tinned Copper

Conductor Count:	26

Insulation

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.010 in

Color Chart

Color
Gray

Table Notes:	First Conductor has Black Stripe

Construction and Dimensions

Conductor Spacing Center-Center:	.0394 +/- .003 in
Conductor Spacing Center-Center Outside:	.984 +/- .008 in
OuterJacket1, Nominal Width:	1.020 +/- .008 in
OuterJacket1, Nom Thick Flat Section:	0.0394 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
68.2 Ohm/1000ft

Capacitance

Element	Nom. Capacitance Conductor to Conductor
@ 1 kHz (GSG)	20 pF/ft
@ 1 MHz (GS)	9.5 pF/ft
@ 1 MHz (GSG)	16.5 pF/ft

Min Insulation Resistance:	10,000 MOhm

Inductance

Element	Nominal Inductance
@ 1 MHz (GS)	0.24 µH/ft

@ 1 MHz (GSG)	0.16 µH/ft

Impedance

Nominal Balanced Characteristic Impedance Description	Nominal Characteristic Impedance	Nominal Characteristic Impedance Description
(GS)	130 Ohm	(GS)
(GSG)	90 Ohm	(GSG)

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
10 MHz	3.3 dB/100ft
20 MHz	5.1 dB/100ft
30 MHz	7 dB/100ft
40 MHz	8.3 dB/100ft
50 MHz	9.8 dB/100ft
60 MHz	11.6 dB/100ft
70 MHz	13.1 dB/100ft
80 MHz	14.2 dB/100ft
90 MHz	16.4 dB/100ft
100 MHz	17.6 dB/100ft

Table Notes:	GSG=Ground-Signal-Ground

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.47 ns/ft	69%

Unbalanced Crosstalk

Element	Typical Unbalanced NEXT %	Typical Unbalanced FEXT %	Typical Cross Talk Pulse Rise Time (ns)
10 ft. sample length	4.3	6.7	3 ns
10 ft. sample length	3.8	3.4	5 ns
10 ft. sample length	3.6	2.5	7 ns

Current

Max. Recommended Current [A]
1 Amp per Conductor at 20ºC

Voltage

Dielectric Withstand Voltage	UL Voltage Rating
2000 V	300 V

Temperature Range

Operating Temperature Range:	-40°C to +105°C

Mechanical Characteristics

Bulk Cable Weight:	30 lbs/1000ft
Min. Bend Radius During Installation:	0.5 in
Min. Bend Radius/Minor Axis:	0.5 in

Standards

UL AWM Style Compliance:	AWM 2651
CSA AWM Compliance:	I A

Applicable Environmental and Other Programs

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:	Yes
EU CE Mark:	Yes
CA Prop 65 (CJ for Wire and Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	VW-1
UL voltage rating:	300 V

Plenum/Non-Plenum

Plenum (Y/N):	No

History

Update and Revision:	Revision Number: 0.322 Revision Date: 05-05-2023

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