



Product: [2L28050](#)

Flat Gray Ribbon Cable 1mm Pitch, 2L280XX Series, #28-50c, PVC Ins

Product Description

Flat Gray Ribbon Cable 1.00mm Pitch, 2L280XX Series, 50 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
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material
28	7x36	TC - Tinned Copper

Conductor Count:	50
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Insulation

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.010 in

Color Chart

Color
Gray

Table Notes:	First Conductor has Black Stripe
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Construction and Dimensions

Cond Spacing Center-Center:	.0394 +/- .003 in
Cond Spacing Center-Center Outside:	1.929 +/- .012 in
OuterJacket1, Nominal Width:	1.964 +/- .012 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

Inductance

Element	Nominal Inductance
@ 1 MHz (GS)	0.24 μ H/ft
@ 1 MHz (GSG)	0.16 μ H/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
1.47 ns/ft

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 20°C

Voltage

Dielectric Withstand Voltage	UL Voltage Rating
2000 V	300 V

Temperature Range

Operating Temp Range:	-40°C to +105°C
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Mechanical Characteristics

Bulk Cable Weight:	57 lbs/1000ft
Min Bend Radius During Installation:	1.4 in
Min Bend Radius/Minor Axis:	1.4 in

Standards

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

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	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 RoHS Compliance Date (yyyy-mm-dd):	2005-07-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LSOH, Toxicity Testing

UL Flammability:	VW-1
CSA Flammability:	FT1
UL voltage rating:	300 V

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Length	UPC
2L28050 008H100	Gray	100 ft	612825127567

History

Update and Revision:	Revision Number: 0.246 Revision Date: 08-07-2020
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