

Product: 9L30050

Flat Gray Ribbon Cable .025" Pitch, 9L300XX Series, #30-50c, PVC Ins

Product Description

Miniaturized Flat Gray Ribbon Cable .025" Pitch, 9L300XX Series, 50 Conductor, 30 AWG (7x38) Tinned Copper, PVC Insulation

Technical Specifications

Product Overview

Suitable Applications:	Internal interconnection, internal wiring of electronic equipment, higher signal density, design flexibility, reliable mass-termination to standard IDC connectors

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material
30	7x38	TC - Tinned Copper

Conductor Count:	50

Insulation

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.008 in

Color Chart

Color
Gray

Table Notes:	First Conductor has Red Stripe

Construction and Dimensions

Conductor Spacing Center-Center:	.025 +/- .002 in
Conductor Spacing Center-Center Outside:	1.225 +/- .007 in
OuterJacket1, Nominal Width:	1.250 +/- .007 in
OuterJacket1, Nom Thick Flat Section:	0.027 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
108 Ohm/1000ft

Capacitance

Element	Nom. Capacitance Conductor to Conductor
@ 1 kHz (GS)	18 pF/ft
@ 1 kHz (GSG)	32 pF/ft
@ 1 MHz (GS)	14 pF/ft
@ 1 MHz (GSG)	24 pF/ft

Min Insulation Resistance:	10,000 MOhm

Inductance

Element	Nominal Inductance

@ 1 MHz (GS)	0.21 µH/ft
@ 1 MHz (GSG)	0.14 µH/ft

Impedance

Nominal Balanced Characteristic Impedance Description	Nominal Characteristic Impedance	Nominal Characteristic Impedance Description
(GS)	105 Ohm	(GS)
(GSG)	70 Ohm	(GSG)

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
10 MHz	5.4 dB/100ft
20 MHz	9.5 dB/100ft
30 MHz	14.1 dB/100ft
40 MHz	18 dB/100ft
50 MHz	20.1 dB/100ft
60 MHz	24.9 dB/100ft
70 MHz	26.5 dB/100ft
80 MHz	30 dB/100ft
90 MHz	30.6 dB/100ft
100 MHz	33 dB/100ft

Table Notes:	GSG=Ground-Signal-Ground Mode

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.52 ns/ft	66%

Unbalanced Crosstalk

Element	Typical Unbalanced NEXT %	Typical Unbalanced FEXT %	Typical Cross Talk Pulse Rise Time (ns)
10 ft. sample length	6	7.1	3 ns
10 ft. sample length	5.4	7	5 ns
10 ft. sample length	5	6.6	7 ns

Current

Max. Recommended Current [A]
0.5 Amps per Conductor at 20ºC

Voltage

Dielectric Withstand Voltage	UL Voltage Rating
2000 V	150 V

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	33 lbs/1000ft
Min. Bend Radius/Minor Axis:	0.5 in

Standards

UL AWM Style Compliance:	AWM 2678
CSA AWM Compliance:	II A

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	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:	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:	150 V

Plenum/Non-Plenum

Plenum (Y/N):	No

Related Part Numbers

Variants

Item #	Color	Length	UPC
9L30050 008H100	Gray	100 ft	612825221777

History

Update and Revision:	Revision Number: 0.324 Revision Date: 05-05-2023

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