



**Product:** <u>9L28026</u> ☑

Flat Gray Ribbon Cable .050" Pitch, 9L280XX Series, #28-26c, PVC Ins

# **Product Description**

Flat Gray Ribbon Cable .050" Pitch, 9L280XX Series, 26 Conductor, 28 AWG (7x36) Tinned Copper, PVC Insulation

# **Technical Specifications**

#### **Product Overview**

| Suitable Applications: | Internal interconnection, internal wiring of electronic equipment, reliable mass-termination to standard IDC connectors |
|------------------------|---|
|                        |   |

## **Physical Characteristics (Overall)**

#### Conductor

#### Insulation

| Material                 | Nominal Wall Thickness |
|--------------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.010 in               |

## Color Chart



Table Notes: First Conductor has Red Stripe

# **Construction and Dimensions**

| Conductor Spacing Center-Center:         | .050 +/002 in  |
|--|----------------|
| Conductor Spacing Center-Center Outside: | 1.250 +/008 in |
| OuterJacket1, Nominal Width:             | 1.300 +/008 in |
| OuterJacket1, Nom Thick Flat Section:    | 0.035 in       |

#### **Electrical Characteristics**

#### **Conductor DCR**

Nominal Conductor DCR 68.2 Ohm/1000ft

## Capacitance

| Element           | Nom. Capacitance Conductor | to Conductor |
|-------------------|----------------------------|--------------|
| @ 1 kHz (GSG)     | 18 pF/ft                   |              |
| @ 1 MHz (GS)      | 10 pF/ft                   |              |
| @ 1 MHz (GSG)     | 15 pF/ft                   |              |
| Min Insulation Re | esistance:                 | 10,000 MOhm  |

#### Inductance

| Element      | Nominal Inductance |
|--------------|--------------------|
| @ 1 MHz (GS) | 0.29 μH/ft         |

@ 1 MHz (GSG) 0.2 μH/ft

#### Impedance

| Nominal Characteristic Impedance | Nominal Characteristic Impedance Description |
|----------------------------------|--|
| 150 Ohm                          | (GS)   |
| 105 Ohm                          | (GSG)  |

# High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 10 MHz          | 2.8 dB/100ft        |
| 20 MHz          | 4.8 dB/100ft        |
| 30 MHz          | 6.5 dB/100ft        |
| 40 MHz          | 8.3 dB/100ft        |
| 50 MHz          | 9.8 dB/100ft        |
| 60 MHz          | 12 dB/100ft         |
| 70 MHz          | 13 dB/100ft         |
| 80 MHz          | 14 dB/100ft         |
| 90 MHz          | 15.8 dB/100ft       |
| 100 MHz         | 17 dB/100ft         |

Table Notes:

GS=Ground-Signal Mode; GSG=Ground-Signal-Ground Mode

# Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.4 ns/ft     | 72%                                      |

### Unbalanced Crosstalk

| Element              | Typical Unbalanced NEXT % | Typical Unbalanced FEXT % | Typical Cross Talk Pulse Rise Time (ns) |
|----------------------|---------------------------|---------------------------|---|
| 10 ft. sample length | 4.8                       | 7                         | 3 ns                                    |
| 10 ft. sample length | 3.5                       | 4.7                       | 5 ns                                    |
| 10 ft. sample length | 3                         | 3                         | 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 Temperature Range: | -40°C to +105°C |  |
|------------------------------|-----------------|--|

# **Mechanical Characteristics**

| Bulk Cable Weight: | 30 lbs/1000ft |
|--------------------|---------------|
|                    |               |

### **Standards**

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

# **Applicable Environmental and Other Programs**

| EU Directive 2000/53/EC (ELV):               | Yes                           |
|--|-------------------------------|
| EU Directive 2003/96/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:                                  | 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 |
|---------------|----|

#### **Related Part Numbers**

#### Variants

| ltem #          | Color | Length | UPC          |
|-----------------|-------|--------|--------------|
| 9L28026 008H100 | Gray  | 100 ft | 612825221678 |

#### **History**

| Update and Revision: | Revision Number: 0.388 Revision Date: 05-05-2023 |  |
|----------------------|--|--|

#### © 2023 Belden, Inc

#### All Rights Reserved

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.