



Product: [9L28050](#)

Flat Gray Ribbon Cable .050" Pitch, 9L280XX Series, #28-50c, PVC Ins

Product Description

Flat Gray Ribbon Cable .050" Pitch, 9L280XX Series, 50 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 |
|------------------------|---|

Construction Details

Conductor

| Element | No. of Elements | Size | Stranding | Material |
|--------------|-----------------|--------|-----------|--------------------|
| Conductor(s) | 50 | 28 AWG | 7x36 | TC - Tinned Copper |

Insulation

| Element | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code | Notes |
|--------------|--------------------------|--------------------|--------------------------|------------|---------------------------------------|
| Conductor(s) | PVC - Polyvinyl Chloride | 0.010 in (0.25 mm) | 0.035 in (0.89 mm) | Gray | A Red Stripe over the first conductor |

| | |
|--|-------------------|
| Conductor Spacing Center-Center: | .050 +/- .002 in |
| Conductor Spacing Center-Center Outside: | 2.450 +/- .011 in |

Electrical Characteristics

Electricals

| Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Characteristic Impedance | Nom. Delay | Nom. Inductance | Nom. Velocity of Prop. | Max. Current |
|--------------------|-------------------------------|-------------------------------|----------------------|------------------------|------------------------|-----------------------------|
| 68.2 Ohm/1000ft | 18 pF/ft (59 pF/m) | 150 Ohm | 1.4 ns/ft (4.6 ns/m) | 0.29 µH/ft (0.95 µH/m) | 72% | 1 Amp per Conductor at 20°C |
| | 10 pF/ft (33 pF/m) | 105 Ohm | | 0.2 µH/ft (0.66 µH/m) | | |
| | 15 pF/ft (49 pF/m) | | | | | |

Unbalanced Crosstalk

| Element | Typical Unbalanced NEXT % | Typical Unbalanced FEXT % | Typical Cross Talk Pulse Rise Time |
|----------------------|---------------------------|---------------------------|------------------------------------|
| 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 |

High Frequency (Nominal/Typical)

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

| | |
|-----|-------------|
| 100 | 17 dB/100ft |
|-----|-------------|

| | |
|--------------|--|
| Table Notes: | GS=Ground-Signal Mode; GSG=Ground-Signal-Ground Mode |
|--------------|--|

Voltage

UL Voltage Rating

300 V

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|-----------------|
| 105°C | -40°C to +105°C |

Bend Radius

Installation Min.

0.5 in (13 mm)

| | |
|--------------------|---------------|
| Bulk Cable Weight: | 65 lbs/1000ft |
|--------------------|---------------|

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor |
| Flammability / Reaction to Fire: | VW-1 |
| AWM Compliance: | AWM 2651, AWM 1/11, A |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

History

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|----------------------|--|
| Update and Revision: | Revision Number: 0.499 Revision Date: 01-20-2023 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Length | UPC |
|-----------------|-------|--------|--------------|
| 9L28050 008H100 | Gray | 100 ft | 612825221708 |

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