



Product: [9L28309](#)

Shielded Flat Ribbon Cable .050" Pitch, 9L283XX Series, #28-9c, PVC Ins, O/A Foil Tape, PVC Jacket

Product Description

Shielded Flat Ribbon Cable .050" Pitch, 9L283XX Series, 9 Conductor, 28 AWG (7x36) Tinned Copper, Gray PVC Insulation, Beldfoil® Tape, Black PVC Jacket

Technical Specifications

Product Overview

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

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material |
|-----|-----------|--------------------|
| 28 | 7x36 | TC - Tinned Copper |

| | |
|------------------|---|
| Conductor Count: | 9 |
|------------------|---|

Insulation

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

Color Chart

Color

Gray

| | |
|--------------|--------------------------------|
| Table Notes: | First Conductor has Red Stripe |
|--------------|--------------------------------|

Outer Shield Material

| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|------|-------------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | Bi-Laminate (Alum+Poly) | Beldfoil® | 100% | TC - Tinned Copper | 28 | 7x36 |

Outer Jacket Material

| Material | Nominal Wall Thickness |
|--------------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.038 in |

Construction and Dimensions

| | |
|---------------------------------------|------------------|
| Cond Spacing Center-Center: | .050 +/- .002 in |
| Cond Spacing Center-Center Outside: | .400 +/- .008 in |
| OuterJacket1, Nominal Width: | .520 in |
| OuterJacket1, Nom Thick Flat Section: | 0.115 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR |
|-----------------------|
| 68.2 Ohm/1000ft |

Capacitance

| Element | Nom. Capacitance Conductor to Conductor |
|------------------------------------|---|
| @ 1 kHz (GSG) with shield grounded | 70 pF/ft |
| @ 1 MHz (GSG) with shield grounded | 50 pF/ft |

Inductance

| Element | Nominal Inductance |
|------------------------------------|--------------------|
| @ 1 MHz (GSG) with shield grounded | 0.11 µH/ft |

Impedance

| Nominal Characteristic Impedance | Nominal Characteristic Impedance Description |
|----------------------------------|--|
| 45 Ohm | (GSG) with shield grounded |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 10 MHz | 6 dB/100ft |
| 20 MHz | 9.5 dB/100ft |
| 30 MHz | 12.5 dB/100ft |
| 40 MHz | 14.9 dB/100ft |
| 50 MHz | 17.2 dB/100ft |
| 60 MHz | 19 dB/100ft |
| 70 MHz | 21.5 dB/100ft |
| 80 MHz | 23 dB/100ft |
| 90 MHz | 24.5 dB/100ft |
| 100 MHz | 26 dB/100ft |

Table Notes: GSG=Ground-Signal-Ground Mode

Delay

| Nominal Delay |
|---------------|
| 1.7 ns/ft |

Unbalanced Crosstalk

| Element | Typical Unbalanced NEXT % | Typical Unbalanced FEXT % | Typical Cross Talk Pulse Rise Time (ns) |
|--|---------------------------|---------------------------|---|
| 10 ft. sample length with ground connected to shield | 1.5 | 2 | 3 ns |
| 10 ft. sample length with ground connected to shield | 0.9 | 1.5 | 5 ns |
| 10 ft. sample length with ground connected to shield | 0.7 | 1.2 | 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: -20°C to +105°C

Mechanical Characteristics

| | |
|--------------------------------------|---------------|
| Bulk Cable Weight: | 44 lbs/1000ft |
| Min Bend Radius During Installation: | 3.0 in |
| Min Bend Radius/Minor Axis: | 1.25 in |

Standards

| | |
|--------------------------|-------|
| UL AWM Style Compliance: | 20081 |
| CSA AWM Compliance: | II 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 II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |

| | |
|---------------------------------------|-------------------------------|
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-10-01 |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|-----------------------|-----|
| Suitability - Indoor: | Yes |
|-----------------------|-----|

Flammability, LSOH, Toxicity Testing

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

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC |
|----------------|-------|------------|--------|--------------|
| 9L28309 010100 | Black | Reel | 100 ft | 612825221722 |

| | |
|-----------|--|
| Footnote: | E - MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'. |
|-----------|--|

History

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|----------------------|--|
| Update and Revision: | Revision Number: 0.323 Revision Date: 11-19-2020 |
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