Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

9L28009 Flat - Gray Ribbon 9L280XX Series



For more Information please call

1-800-Belden1



Description:

Belden^s .050" pitch gray ribbon cable was designed for general purpose electronic interconnect applications. The cable provides reliable mass-termination to standard IDC connectors.

| Physical Characteristics (Overall) Conductor AWG: # Conductors AWG Stranding Conductor Material 9 28 7x36 TC - Tinned Copper Conductor Spacing Center to Center: .050 +/002 Conductor Spacing Outside Center to Outside .40 +/008 Center: Insulation Insulation Material: .40 +/008 PVC - Polyvinyl Chloride .010 Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Unshielded .035 +/003 Overall Nominal Thickness: .035 +/003 | |
|--|--|
| # Conductors AWG Stranding Conductor Material 9 28 7x36 TC - Tinned Copper Conductor Spacing Center to Center: .050 +/002 Conductor Spacing Outside Center to Outside .40 +/008 Center: Insulation Insulation Material: .40 +/008 PVC - Polyvinyl Chloride .010 Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Unshielded .005 Overall Cable .035 +/003 | |
| 9 28 7x36 TC - Tinned Copper Conductor Spacing Center to Center: .050 +/002 Conductor Spacing Outside Center to Outside .40 +/008 Center: .40 +/008 Insulation Insulation Material: Insulation Material Wall Thickness (in.) PVC - Polyvinyl Chloride .010 Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Unshielded Overall Cable Overall Nominal Thickness: .035 +/003 | |
| Conductor Spacing Center to Center: .050 +/002 Conductor Spacing Outside Center to Outside .40 +/008 Center: Insulation Insulation Insulation Material: Insulation Material Wall Thickness (in.) PVC - Polyvinyl Chloride .010 Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Unshielded .035 +/003 | |
| Conductor Spacing Outside Center to Outside Center: .40 +/008 Insulation Insulation Material: Insulation Material: PVC - Polyvinyl Chloride .010 Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Outer Shield Material: Outer Shield Material: Outer Shield Material Unshielded .035 +/003 | |
| Center: Insulation Insulation Material: Insulation Material VC - Polyvinyl Chloride .010 Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Outer Shield Material: Outer Shield Material: Overall Cable .035 +/003 | |
| Insulation Material: Insulation Material Wall Thickness (in.) PVC - Polyvinyl Chloride 0.10 Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Outer Shield Material: Unshielded Overall Cable Overall Nominal Thickness: .035 +/003 | |
| Insulation Material Wall Thickness (in.) PVC - Polyvinyl Chloride .010 Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Outer Shield Material Unshielded Overall Cable .035 +/003 | |
| PVC - Polyvinyl Chloride .010 Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Outer Shield Material Unshielded Overall Cable Overall Nominal Thickness: .035 +/003 | |
| Insulation Resistance: >10, 000 Megaohms Outer Shield Outer Shield Material: Outer Shield Material Unshielded Overall Cable Overall Nominal Thickness: .035 +/003 | |
| Outer Shield Outer Shield Material: Outer Shield Material Unshielded Overall Cable Overall Nominal Thickness: .035 +/003 | |
| Outer Shield Material Outer Shield Material Unshielded Overall Cable Overall Nominal Thickness: | |
| Outer Shield Material Unshielded Overall Cable Overall Nominal Thickness: .035 +/003 | |
| Unshielded Overall Cable Overall Nominal Thickness: .035 +/003 | |
| Overall Cable Overall Nominal Thickness: .035 +/003 | |
| Overall Nominal Thickness: .035 +/003 | |
| | |
| Overall Neminal Width: $4E \pm 1000$ | |
| Overall Nominal Width: .45 +/008 | |
| Mechanical Characteristics (Overall) | |
| Operating Temperature Range: -40°C To +105°C | |
| Applicable Specifications and Agency Compliance (Overall) | |
| Applicable Standards & Environmental Programs | |
| UL AWM Style: 2651 | |
| UL Rating: 105°C, 300 V RMS, VW-1 | |
| CSA Specification:AWM I A 105°C 300 V FT1 | |
| CSA Rating: 105°C, 300 V RMS, FT1 | |
| EU CE Mark: Yes | |
| EU Directive 2000/53/EC (ELV): Yes | |
| EU Directive 2002/95/EC (RoHS): Yes | |
| EU RoHS Compliance Date (mm/dd/yyyy): 07/01/2005 | |
| EU Directive 2002/96/EC (WEEE): Yes | |
| EU Directive 2003/11/EC (BFR): Yes | |

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| CA Prop 65 (CJ for Wire & Cable): | Yes |
|-----------------------------------|------|
| MII Order #39 (China RoHS): | Yes |
| Flame Test | |
| UL Flame Test: | VW-1 |
| CSA Flame Test: | FT1 |
| Plenum/Non-Plenum | |
| Plenum (Y/N): | No |
| | |

Surface Printing (Overall)

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

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

Nom. Inductance:

| Description | Inductance (µH/ft) | | |
|---------------|--------------------|--|--|
| @ 1 MHz (GS) | .29 | | |
| @ 1 MHz (GSG) | .20 | | |

Nom. Capacitance Conductor to Conductor:

| Description | Capacitance (pF/ft) |
|---------------|---------------------|
| @ 1 kHz (GSG) | 18 |
| @ 1 MHz (GS) | 10 |
| @ 1 MHz (GSG) | 15 |

Nominal Velocity of Propagation:



Nominal Delay:

Delay (ns/ft) 1.40 NS/FT. (GSG)

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

68.2 OHMS/1000 FT. MAX.

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 10 | 2.8 |
| 20 | 4.8 |
| 30 | 6.5 |
| 40 | 8.3 |
| 50 | 9.8 |
| 60 | 12 |
| 70 | 13 |
| 80 | 14 |
| 90 | 15.8 |
| 100 | 17 |

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current 1 Amp per conductor @ 20°C

Dielectric Withstand Voltage:

Typical Unbalanced Crosstalk:

2, 000 V RMS

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| Description | Pulse Rise Time (NS) (MHz) | Near End % (MHz) | Far End % (MHz) |
|----------------------|----------------------------|------------------|-----------------|
| 10 ft. sample length | 3 | 4.8 | 7 |
| 10 ft. sample length | 5 | 3.5 | 4.7 |
| 10 ft. sample length | 7 | 3 | 3 |

Notes (Overall)

Notes: GSG=Ground-Signal-Ground Mode

Polarity Identification (Overall)

Polarity Identification:

RED POLARITY STRIPE ON #1 CONDUCTOR

Related Documents:

No related documents are available for this product

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|-----------------|--------|-------------|-------|-------|-------------------------------|
| 9L28009 008H100 | 100 FT | 1.000 LB | GRAY | | 9 #28 STR PVC RIBBON (SMI 80) |
| 9L28009 008H300 | 300 FT | 3.000 LB | GRAY | | 9 #28 STR PVC RIBBON |

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