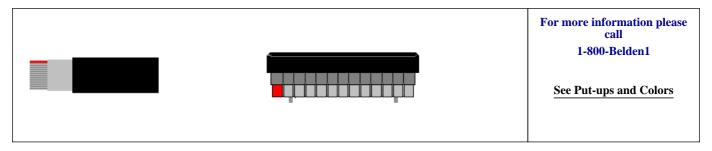
# Detailed Specifications & Technical Data



## 9L28309 Flat - 9L283XX - .050 in. Pitch



#### **Description:**

The shielded jacketed 9L283XX series provides shielding from external electrical interference and allows for greater flexibility, ease of termination, while providing exterior protection from the environment.

#### PHYSICAL CHARACTERISTICS:

#### **CONDUCTOR:**

Number of Conductors	9	
Total Number of Conductors	9	
AWG	28	
	7x36	
Stranding	1.11	
Conductor Material	TC - Tinned Copper	

## **INSULATION:**

Insulation Material	PVC - Polyvinyl Chloride
Nom. Insulation Wall Thickness	.010 in.
Insulation Resistance	>10, 000 Mega Ohms

#### **SPACING:**

Conductor Spacing Center to Center	.050 +/002 in.
Conductor Spacing Outside Center to Outside Center	.40 +/008 in.

#### **OVERALL:**

Overall Nominal Width	.55 in.
Overall Nominal Thickness	.122 +/012 in.

#### **OUTER SHIELD:**

Outer Shield Trade Name	Duofoil®
Outer Shield Type	Tape
Outer Shield Material	Aluminum Foil-Polyester Tape-Aluminum Foil
Outer Shield %Coverage	100 %

#### OUTER SHIELD DRAIN WIRE

OUTER SHIELD DRAIN WIKE:	
Outer Shield Drain Wire AWG	2-28
Outer Shield Drain Wire Stranding	7x36
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper

#### **OUTER JACKET:**

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Outer Jacket Material PVC - Polyvinyl Chloride

Outer Jacket Nominal Wall Thickness .038 in.

**MECHANICAL CHARACTERISTICS:** 

Operating Temperature Range -20°C To 105°C

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

**APPLICABLE STANDARDS:** 

UL AWM Style 20081

UL Rating 105°C, 300 V, VW-1

CSA Specification AWM II A 105°C 300 V, FT1

CSA Rating 105°C, 300 V, FT1

FLAME TEST:

UL Flame Test VW-1
CSA Flame Test FT1

PLENUM/NON-PLENUM:

Plenum (Y/N)

**SURFACE PRINTING:** 

Surface Printing BELDEN-T 28 AWG CSA AWM II A 105°C 300 V FT-1 LL7874 (UL LOGO)

AWM STYLE 20081 VW-1 E12683

POLARITY IDENTIFICATION:

Polarity Identification RED POLARITY STRIPE ON #1 CONDUCTOR

**ELECTRICAL CHARACTERISTICS:** 

Nom. Characteristic Impedance:

Description	Nom. Characteristic Impedance (Ohms)
(GSG) with shield grounded	45

Nom. Inductance :

Description	Nominal Inductance (µH/ft)
@ 1 MHz (GSG) with shield grounded	.11

Nom. Capacitance Conductor to Conductor:

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

Nominal Velocity of Propagation:

Description	Nominal Velocity of Propagation (%)	
	60	

Nominal Delay

1.7 NS/FT. (GSG) with shield grounded

Nom. Conductor DC Resistance @ 20 Deg. C

68.2 OHMS/1000 FT. MAX.

Nom. Attenuation:

## Detailed Specifications & Technical Data



## 9L28309 Flat - 9L283XX - .050 in. Pitch

Description	Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
(GSG) with shield grounded	10	6
(GSG) with shield grounded	20	9.5
(GSG) with shield grounded	30	12.5
(GSG) with shield grounded	40	14.9
(GSG) with shield grounded	50	17.2
(GSG) with shield grounded	60	19
(GSG) with shield grounded	70	21.5
(GSG) with shield grounded	80	23
(GSG) with shield grounded	90	24.5
(GSG) with shield grounded	100	26

#### Typical Unbalanced Crosstalk:

Description	Pulse Rise Time (NS)	Near End (%)	Far End (%)	Typical Unbalanced Crosstalk (dB)
10 ft. sample length with ground connected to shield	3	1.5	2	
10 ft. sample length with ground connected to shield	5	.9	1.5	
10 ft. sample length with ground connected to shield	7	.7	1.2	

Max. Operating Voltage - UL	300 V RMS	
Max. Recommended Current	1 Amp @ 20°C	
Dielectric Withstand Voltage	2, 000 V RMS	

#### NOTES:

Notes	GSG=Ground-Signal-Ground Mode
Tioles	OSO-Ground-Signar-Ground Mode

#### **PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
	9 #28 PVC FS PVC RIBBON	100	3.9	BLACK	Е

## E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

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