

# 3M™ Shrunk Delta Ribbon (SDR) Cable Assembly

.80 mm High Speed Digital Data Transmission, 26 position

1SF26-L1XX-00C-XXX



- Supports AIA Industrial Camera Link® Standard for Mini C/L camera to frame grabber applications
- 11 shielded, twisted twinax pairs with four drain wires
- Double overall shield with inner foil and outer braid
- Rugged ribbon contact type
- Rugged thumbscrew retention
- EMI shielded overmolded junction shell
- Optional R/A overmolded backshells eliminate bend radius
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3M.com/Interconnect](http://www.3M.com/Interconnect) for compliance information (RIA E1 & C1 apply)

Date Modified: August 10, 2009

TS-2120-D  
Sheet 1 of 4

## Physical

### Connector Contact Plating:

Wiping Area: 30  $\mu$ " [ 0.76  $\mu$ m ] Min Gold

Underplating: 100  $\mu$ " [ 2.55  $\mu$ m ] Nickel

### Overmolded Shell:

Color: Black

Material: Polyvinyl Chloride (PVC)

### Cable:

Color: Beige

Jacket Material: Polyvinyl Chloride (PVC)

Flammability: AWM VW-1

Marking: 3M Logo

## Electrical

**Voltage Rating:** 30 V

**Current Rating:** 0.5 A

**Insulation Resistance:** 1 X 10<sup>8</sup>  $\Omega$  min at 100 V<sub>DC</sub>

**Withstanding Voltage:** 125 V<sub>AC</sub> RMS for 1 minute

### Individually Shielded Twisted Pairs

Characteristic Impedance: 100  $\pm$  10 $\Omega$

Conductor Size: 28 AWG Stranded

Propagation Velocity: 1.25 ns/ft [4.1 ns/m]

Skew (within pair): 50 ps / meter maximum

Skew (channel skew per chipset): 50 ps / meter maximum

## Environmental

**Temperature Rating:** 0°C to +70°C

UL File No.: E86982

Camera Link is a certification mark of Automated Imaging Association

**3M**

Electronic Solutions Division  
Interconnect Solutions  
<http://www.3M.com/interconnects/>

3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

# 3M™ Shrunk Delta Ribbon (SDR) Cable Assembly

.80 mm High Speed Digital Data Transmission, 26 position

1SF26-L1XX-00C-XXX

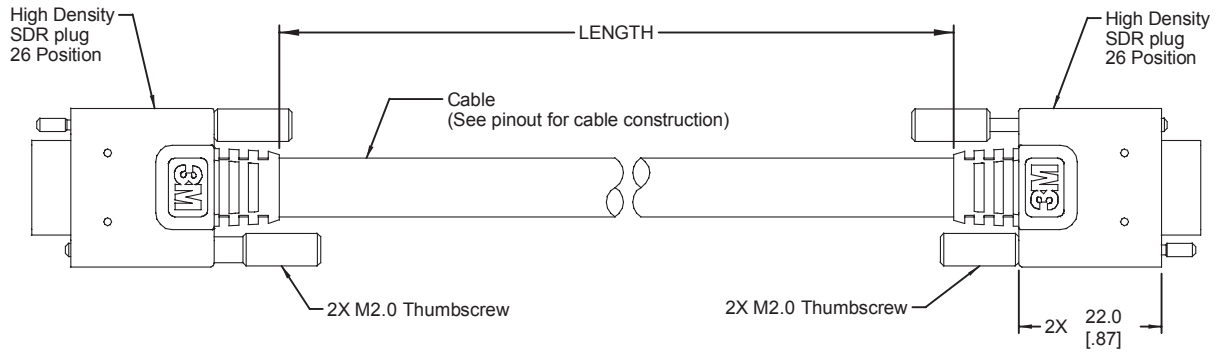


Figure 1  
Straight SDR to Straight SDR Cable Assembly  
Option 20

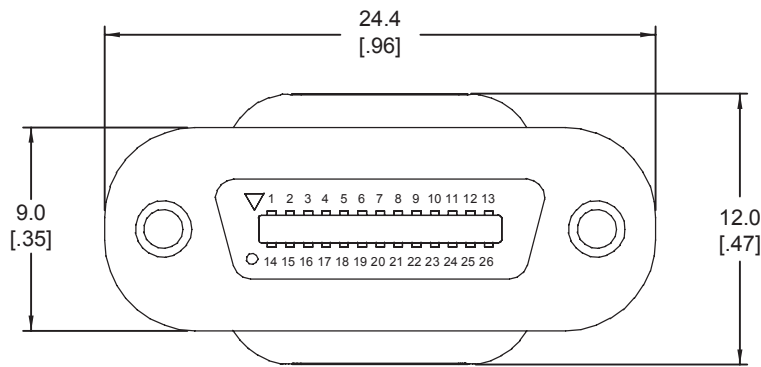


Figure 2  
Straight SDR to Straight SDR Cable Assembly

mm [inch]		
Tolerance Unless Noted		
	.0	.00
mm	± .1	± .01

[ ] Dimensions used for Reference Only

Note:

1. For length dimension, refer to the product ordering number.



TS-2120-D  
Sheet 2 of 4

# 3M™ Shrunk Delta Ribbon (SDR) Cable Assembly

.80 mm High Speed Digital Data Transmission, 26 position

1SF26-L1XX-00C-XXX

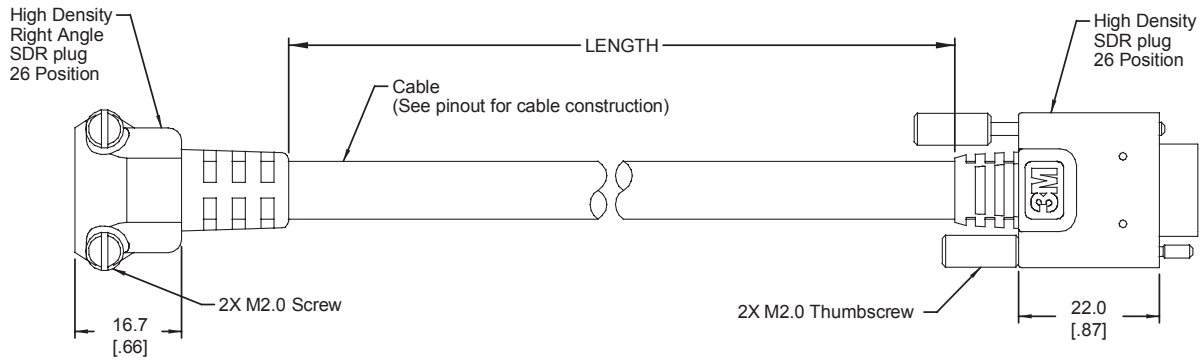


Figure 3  
R/A SDR to SDR Cable Assembly  
Options 36 & 37

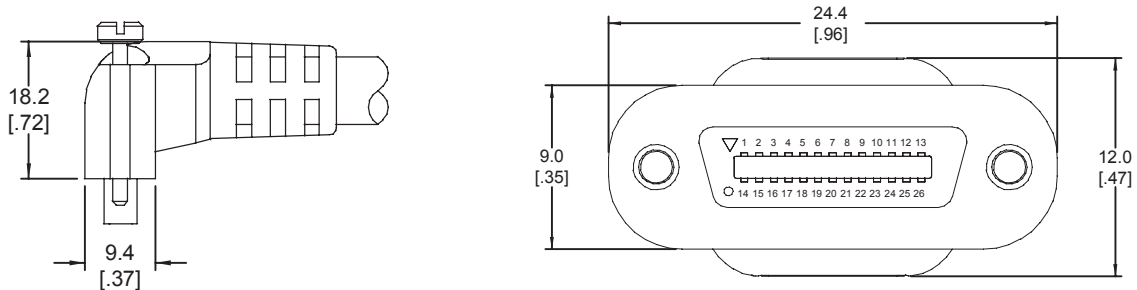


Figure 4  
Overmolded R/A SDR Connector

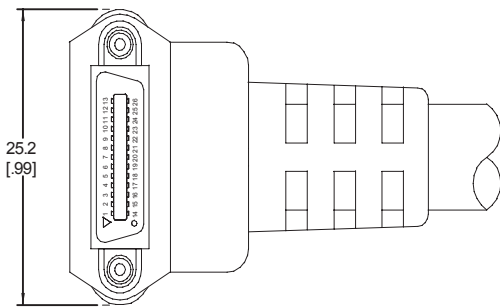


Figure 5  
Overmolded R/A SDR Connector  
(36 option)

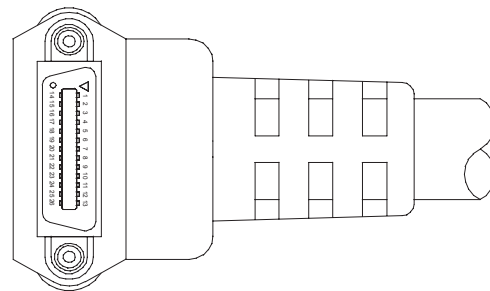


Figure 6  
Overmolded R/A SDR Connector  
(37 option)

mm [inch]		
Tolerance Unless Noted		
	.0	.00
mm	± .1	± .01

[ ] Dimensions used for Reference Only

TS-2120-D  
Sheet 3 of 4

# 3M™ Shrunk Delta Ribbon (SDR) Cable Assembly

.80 mm High Speed Digital Data Transmission, 26 position

1SF26-L1XX-00C-XXX

CN-1 Conn. Pos.	Base Configuration					CN-2 Conn. Pos.
	Full / Medium configuration					
			Cable			
2	XO-	YO-	TWINAX 1	YO-	XO-	25
15	XO+	YO+		YO+	XO+	12
3	X1-	Y1-	TWINAX 2	Y1-	X1-	24
16	X1+	Y1+		Y1+	X1+	11
4	X2-	Y2-	TWINAX 3	Y2-	X2-	23
17	X2+	Y2+		Y2+	X2+	10
5	XC-	Yclk-	TWINAX 4	Yclk-	XC-	22
18	XC+	Yclk+		Yclk+	XC+	9
6	X3-	Y3-	TWINAX 5	Y3-	X3-	21
19	X3+	Y3+		Y3+	X3+	8
7	Ser TC+	100 ohm	TWINAX 6	100 ohm	Ser TC+	20
20	Ser TC-	Terminated		Terminated	Ser TC-	7
8	Ser TFG-	ZO-	TWINAX 7	ZO-	Ser TFG-	19
21	Ser TFG+	ZO+		ZO+	Ser TFG+	6
9	CC1-	Z1-	TWINAX 8	Z1-	CC1-	18
22	CC1+	Z1+		Z1+	CC1+	5
10	CC2+	Z2-	TWINAX 9	Z2-	CC2+	17
23	CC2-	Z2+		Z2+	CC2-	4
11	CC3-	Zclk-	TWINAX 10	Zclk-	CC3-	16
24	CC3+	Zclk+		Zclk+	CC3+	3
12	CC4+	Z3-	TWINAX 11	Z3-	CC4+	15
25	CC4-	Z3+		Z3+	CC4-	2
1	INNER SHIELD	INNER SHIELD	DRAIN WIRE	INNER SHIELD	INNER SHIELD	1
14	INNER SHIELD	INNER SHIELD		INNER SHIELD	INNER SHIELD	14
13	INNER SHIELD	INNER SHIELD		INNER SHIELD	INNER SHIELD	13
26	INNER SHIELD	INNER SHIELD		INNER SHIELD	INNER SHIELD	26
Shell	BRAID SHIELD					Shell

Table 1  
Cable Assembly Wiring Diagram

## Ordering Information

**1SF26-L1XX-00C-XXX** (RIA E1 & C1 apply)

20 = SDR straight to SDR straight backshell.

36 = The direction of the cable for the RA SDR connector dresses down with respect to a horizontal board mount connector. The topology for the 36 option is a straight overmolded SDR backshell to a R/A overmolded SDR backshell.

37 = The direction of the cable for the RA SDR connector dresses up with respect to a horizontal board mount connector. The topology for the 37 option is a straight overmolded SDR backshell to a R/A overmolded SDR backshell.

Length :  
100 = 1m  
200 = 2m  
500 = 5m  
A00 = 10m

Refer to length dimension in figures 1 & 3  
Reference notes 1 & 2 for cable length tolerance

### Notes:

- For a cable length of less than 2m, the length tolerance is +50mm / -0mm
- For a cable length of 2m or more, the length tolerance is +3% / -0% of cable length

TS-2120-D  
Sheet 4 of 4

**3M**

Electronic Solutions Division  
Interconnect Solutions

<http://www.3M.com/interconnects/>

3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

**Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

**Warranty; Limited Remedy; Limited Liability.**

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

**3M Electronics Solutions Division**

6801 River Place Blvd.  
Austin, TX 78726-9000  
U.S.A.  
1-800-225-5373  
www.3mconnectors.com

Please recycle. Printed in USA.  
© 3M 2009. All rights reserved.

3M is a trademark of 3M Company.

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А