## 3M<sup>™</sup> Shrunk Delta Ribbon (SDR) Cable Assembly 1SF26-L1XX-00C-XXX

.80 mm High Speed Digital Data Transmission, 26 position



### • 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 for compliance information (RIA E1 & C1 apply)

Date Modified: August 10, 2009

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### **Physical**

<b>Connector Contact Plating:</b>				
Wiping Area:	$30\mu^{\prime\prime}$ [ $0.76\mu m$ ] Min Gold			
Underplating:	100 μ" [ 2.55 μm ] Nickel			
<b>Overmolded Shell:</b>				
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			
<b>Insulation Resistance:</b>	$1 \: X \: 10^8  \Omega$ min at 100 $V_{_{DC}}$			
Withstanding Voltage:	125 $V_{_{\!AC}}RMS$ for 1 minute			
Individually Shielded Twisted Pairs				
Characteristic Impedance:	$100\pm10\Omega$			
Conductor Size:	28 AWG Stranded			
Propogation 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**

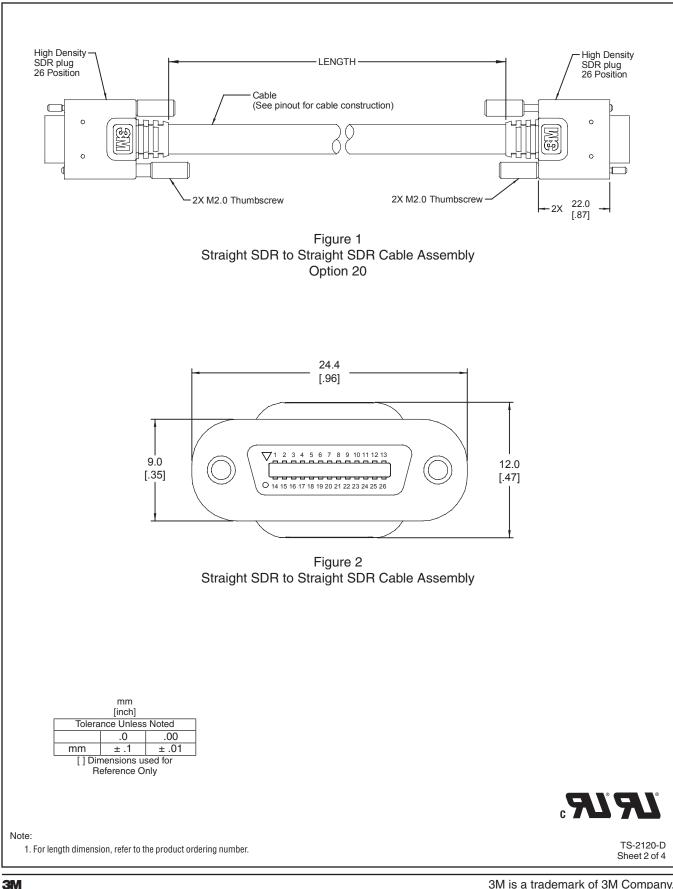
**Temperature Rating:** 0°C to +70°C

UL File No.: E86982

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High Density High Density SDR plug 26 Position Right Angle SDR plug 26 Position LENGTH Cable (See pinout for cable construction) ND) H H HEN S 0 1)) 2X M2.0 Screw 2X M2.0 Thumbscrew 22.0 16.7 [.87] [.66] Figure 3 R/A SDR to SDR Cable Assembly Options 36 & 37 24.4 AF [.96] 18.2 [.72]  $\nabla$ 8 9 10 11 12 13 9.0 12.0 [.35] [.47] O 14 15 16 17 18 19 20 21 22 23 24 25 26 9.4 [.37] Figure 4 Overmolded R/A SDR Connector 0 25.2 [.99] Figure 5 Figure 6 Overmolded R/A SDR Connector Overmolded R/A SDR Connector (36 option) (37 option) mm [inch] Tolerance Unless Noted .0 .00 mm ± .1 ± .01 [] Dimensions used for **Reference Only** TS-2120-D Sheet 3 of 4

#### ЗМ

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1SF26-L1XX-00C-XXX

	CN-1	Base Configuration CN-2							
	Conn.	Base Configuration Full / Medium configuration					CIN-2 Conn.		
	Pos.		1 011 7	Cable			Pos.		
	2	XO-	YO-		YO-	XO-	25		
	15	XO+	YO+	TWINAX 1	Y0+	XO+	12		
	3	X1-	Y1-		Y1-	X1-	24		
	16	X1+	Y1+	TWINAX 2	Y1+	X1- X1+	11		
	4	X2-	Y2-		Y2-	X2-	23		
	17	X2+	Y2+	TWINAX 3	Y2+	X2+	10		
	5	XC-	Yclk-		Yclk-	XC-	22		
	18	XC+	Yclk+	TWINAX 4	Yclk+	XC+	9		
	6	X3-	Y3-		Y3-	X3-	21		
	19	X3+	Y3+	TWINAX 5	Y3+	X3+	8		
	7	Ser TC+	100 ohm		100 ohm	Ser TC+	20		
	20	Ser TC-	Terminated	TWINAX 6	Terminated		7		
	8	Ser TFG-	ZO-		ZO-	Ser TFG-	19		
	21	Ser TFG+	ZO+	TWINAX 7	ZO+	Ser TFG+	6		
	9	CC1-	Z1-	TWINAX 8	Z1-	CC1-	18		
	22	CC1+	Z1+	IVVIINAAO	Z1+	CC1+	5		
	10	CC2+	Z2-	TWINAX 9	Z2-	CC2+	17		
	23	CC2-	Z2+	IVVIINAA 9	<u>Z</u> 2+	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		
		INNER	INNER		INNER	INNER			
	1	SHIELD	SHIELD		SHIELD	SHIELD	1		
		INNER	INNER		INNER	INNER			
	14	SHIELD	SHIELD	DRAIN WIRE	SHIELD	SHIELD	14		
	10	INNER	INNER		INNER	INNER	10		
	13	SHIELD	SHIELD		SHIELD	SHIELD	13		
	20	INNER				INNER	20		
	26 Shell	SHIELD	SHIELD	BRAID SHIELD	SHIELD	SHIELD	26 Shell		
	Shell			DRAID SHIELL			Shell		
Table 1 Cable Assembly Wiring Diagram									
Ordering I	nformati	on							
<b>1SF26-L1<u>XX</u>-00C-<u>XXX</u> (RIA E1 &amp; C1 apply)</b>									
20 = SDR straight to SDR straight backshell.       Length :         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.       Length :         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.       500 = 5m         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.       A00 = 10m         Notes:									
1. For a cable length of less than 2m, the length tolerance is +50mm / -0mm       TS-2120-D         2. For a cable length of 2m or more, the length tolerance is +3% / -0% of cable length       TS-2120-D         Sheet 4 of 4       Sheet 4 of 4									
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