

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0082245920](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch Round Conductor Flat Cable - 24 AWG (7 x 32) Stranded, Topcoat, 20 Circuits, Reel 30.48m (100.0' ) Length

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR61126  
 UL E61522

**General**

Product Family Cable  
 Series [8997](#)  
 Crimp Quality Equipment Yes  
 Geographic Area Asia  
 Product Name Ribbon

**Physical**

Cable Length 30.48m (100.0' )  
 Circuits (Loaded) 20  
 Insulation PVC  
 Packaging Type Reel  
 Pitch - Term. Interface (in) 0.100 In  
 Pitch - Term. Interface (mm) 2.54 mm  
 Temperature Range - Operating -20°C to +105°C  
 Wire Size AWG 24  
 Wire/Cable Type (7x32) Stranded, Topcoat

**Electrical**

Current - Maximum per Contact N/A  
 Voltage - Maximum 300V

**Material Info**

Old Part Number 8997-20-100B

**Reference - Drawing Numbers**

Sales Drawing SD-8997-001



**EU RoHS**

**ELV and RoHS  
 Compliant  
 REACH SVHC  
 Not Reviewed  
 Halogen-Free  
 Status  
 Not Reviewed**

**China RoHS**



**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

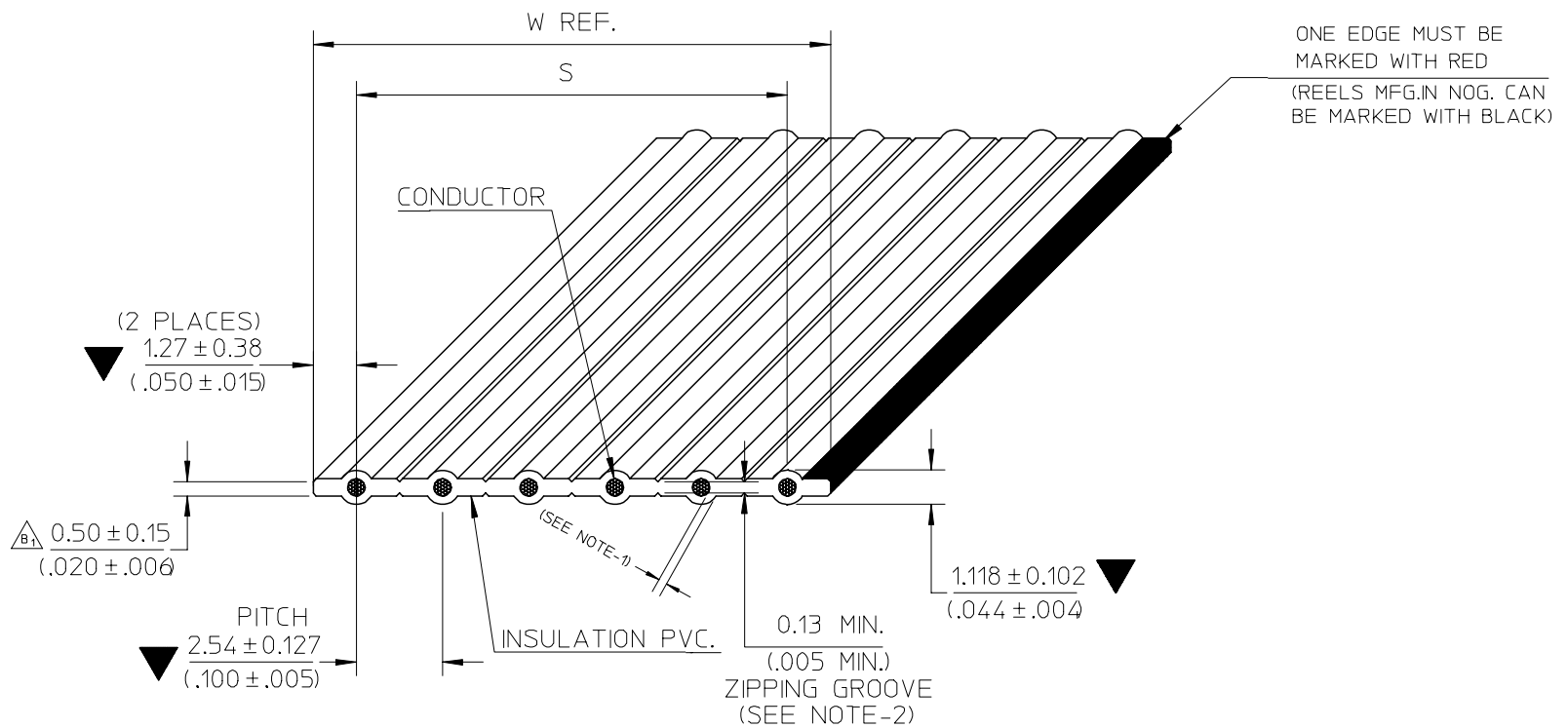
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[8997Series](#)

**Use With**

[70400](#) C-Grid SL™ IDT Connector Assembly. [70475](#) SL™ IDT Connector Assembly. [7720](#) KK® IDT Double Cantilever Contact



- NOTE :**
1. THE CABLE SHALL HAVE A MINIMUM OF 0.178mm. (.007") THICKNESS INSULATION AT ANY POINT
  2. RIP TEST:
    - THE 0.13mm. (.005") ZIPPING GROOVE SHALL BE CAPABLE OF BEING RIPPED BY HAND WITHIN THE RECESS, WITHOUT EXPOSING THE ADJACENT CONDUCTORS
  3. RoHS AND LEAD FREE COMPLIANT
  4. SPECIAL REQUIREMENT: N/A

B	E-07-0748	B <sub>4</sub> : ADD NON-OPERATING TEMP. B <sub>3</sub> : ADD SOLDERING CONDITION B <sub>2</sub> : CHANGE ELECTRICAL B <sub>1</sub> : CHANGE WEB THICKNESS	07/09/26
A	N/A	NEW RELEASE	06/07/18
REV. HISTORY	EC NO.	DETAIL	DATE

SEE CHANGE DETAIL EC NO: THL2008-0015 DRWN: CPANSAKHOM 2007/11/28 CHKD: DNARINTARA 2007/11/29 APPR: SVIRATJAPOL 2007/12/04	DESCRIPTION
	QUALITY SYMBOLS
	▽=3
	▽=0
	REV

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)
▽=3	mm
▽=0	INCH
	ANGULAR ±---°
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
mm	MM/IN	NTS	INCH	
4 PLACES ±---	DRAWN BY	DATE	TITLE	
3 PLACES ±---	CPANSAKHOM	2006/07/18	FCB ROUND CONDUCTOR	
2 PLACES ±---	CHECKED BY	DATE	2.54MM(.100)CENTER PVC.	
1 PLACE ±---	PMEECHAI	2006/07/18	24AWG STRANDED TOPCOATED	
	APPROVED BY	DATE	MOLEX	MOLEX INCORPORATED
	SVIRATJAPOL	2006/07/18	DOCUMENT NO.	SD-8997-001
	MATERIAL NO.		SEE CHART	SHEET NO.
				1 OF 3

DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM/IN	NTS	INCH	
DRAWN BY	DATE	TITLE	
CPANSAKHOM	2006/07/18	FCB ROUND CONDUCTOR	
CHECKED BY	DATE	2.54MM(.100)CENTER PVC.	
PMEECHAI	2006/07/18	24AWG STRANDED TOPCOATED	
APPROVED BY	DATE	MOLEX	MOLEX INCORPORATED
SVIRATJAPOL	2006/07/18	DOCUMENT NO.	SD-8997-001
MATERIAL NO.		SEE CHART	SHEET NO.
			1 OF 3

DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM/IN	NTS	INCH	
DRAWN BY	DATE	TITLE	
CPANSAKHOM	2006/07/18	FCB ROUND CONDUCTOR	
CHECKED BY	DATE	2.54MM(.100)CENTER PVC.	
PMEECHAI	2006/07/18	24AWG STRANDED TOPCOATED	
APPROVED BY	DATE	MOLEX	MOLEX INCORPORATED
SVIRATJAPOL	2006/07/18	DOCUMENT NO.	SD-8997-001
MATERIAL NO.		SEE CHART	SHEET NO.
			1 OF 3

SPECIFICATIONS

PHYSICAL

CONDUCTOR SPACING ----- 2.54 (.100")  $\bar{C}$  TO  $\bar{C}$   
 WIRE GAUGE ----- 24 AWG(7/32) STRANDED TOPCOATED  
 INSULATION ----- P.V.C GRAY (LEAD FREE)

AGENCY

U.L. STYLE NO. ----- 2651  
 TEMPERATURE RATING ----- -20°C TO 105°C  
 VOLTAGE RATING ----- 300V.MAX.  
 FLAMMABILITY RATING ----- VW-1

$\triangle_{B_2}$  ELECTRICAL

CONDUCTOR RESISTANCE (D.C.) ----- 27m. OHMS/FT. MAX.  
 CHARACTERISTIC IMPEDANCE ----- 134 OHMS NOM. (GS)  
 114 OHMS NOM. (GSG)  
 CAPACITANCE ----- 6.6 pF/FT. NOM. (GS)  
 12.0 pF/FT. NOM. (GSG)  
 PROPAGATION DELAY ----- 1.4 ns/FT. NOM.  
 INSULATION RESISTANCE ----- 10M OHMS (10FT. SAMPLE)  
 DIELECTRIC WITHSTAND VOLTAGE ----- 2000 VRMS/MINUTE

GENERAL

$\triangle_{B_4}$  NON-OPERATING TEMPERATURE ----- -20°C TO 105°C  
 FAULTS AND/OR SPLICES ----- 1/REEL MAX. 100 $^{+3}_0$  FT. (30.48 $^{+0.914}_0$  M.)/REEL  
 20FT. (6.096M.) MIN. LENGTH

$\triangle_{B_3}$  SOLDERING CONDITION

SOLDER TEMPERATURE ----- 260°C. MAX.  
 SOLDERING TIME ----- 3 SECOND, MAX.  
 INSULATION SHRINK ----- 2MM. NOM.

SEE CHANGE DETAIL EC NO: THL2008-0015 DRWN: CPANSAKHOM 2007/11/28 CHKD: DNARINTARA 2007/11/29 APPR: SVIRATJAPOL 2007/12/04	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION			
		$\blacktriangledown$ = $\triangle$ =	mm	INCH	MM/IN	NTS	INCH	DRAWN BY CPANSAKHOM DATE 2006/07/18 CHECKED BY PREECHAI DATE 2006/07/18 APPROVED BY SVIRATJAPOL DATE 2006/07/18 MATERIAL NO. SEE CHART DOCUMENT NO. SD-8997-001 SHEET NO. 2 OF 3				
			4 PLACES $\pm$ ----	$\pm$ ----								
				3 PLACES $\pm$ ----	$\pm$ ----			TITLE FCB ROUND CONDUCTOR 2.54MM(.100)CENTER PVC. 24AWG STRANDED TOPCOATED MOLEX INCORPORATED				
				2 PLACES $\pm$ ----	$\pm$ ----							
		1 PLACE $\pm$ ----	$\pm$ ----	ANGULAR $\pm$ ----°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						

E

E

CHART A				
DIMENSIONS MM. (INCHES)				
ENGINEERING NO.	ORDER NO.	NO. OF CONDUCTOR	DIMENSION S	DIM. W (REF.)
8997-02-100B	82-24-5902	2	2.54±0.127(.100±.005)	5.08 (.200)
↑ -03- ↑	↑ 03	3	5.08±0.20 (.200±.008)	7.62 (.300)
-04-	04	4	7.62±0.30 (.300±.012)	10.16 (.400)
-05-	05	5	10.16±0.33 (.400±.013)	12.70 (.500)
-06-	06	6	12.70±0.33 (.500±.013)	15.24 (.600)
-07-	07	7	15.24±0.33 (.600±.013)	17.78 (.700)
-08-	08	8	17.78±0.33 (.700±.013)	20.32 (.800)
-09-	09	9	20.32±0.33 (.800±.013)	22.86 (.900)
-10-	10	10	22.86±0.33 (.900±.013)	25.40 (1.000)
-11-	11	11	25.40±0.33 (1.000±.013)	27.94 (1.100)
-12-	12	12	27.94±0.33 (1.100±.013)	30.48 (1.200)
-13-	13	13	30.48±0.33 (1.200±.013)	33.02 (1.300)
-14-	14	14	33.02±0.33 (1.300±.013)	35.56 (1.400)
-15-	15	15	35.56±0.33 (1.400±.013)	38.10 (1.500)
-16-	16	16	38.10±0.33 (1.500±.013)	40.64 (1.600)
-17-	17	17	40.64±0.33 (1.600±.013)	43.18 (1.700)
-18-	18	18	43.18±0.33 (1.700±.013)	45.72 (1.800)
↓ -19- ↓	↓ 19	19	45.72±0.33 (1.800±.013)	48.26 (1.900)
8997-20-100B	82-24-5920	20	48.26±0.33 (1.900±.013)	50.80 (2.000)

ENGINEERING NO.

8997-XX-XXXX

A B C D

A : CABLE 2.54mm. (.100") CENTERS 24AWG STRANDED TOPCOATED

B : CONDUCTOR SIZE ( AVAILABILITY 2 THROUGH 20 )

C : CABLE LENGTH 100FT. (30.48M.)

D : A = INCHES

B = FEET

D

D

C

C

B

B

A

A

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		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± --- ± ---	1 PLACE ± --- ± ---	ANGULAR ± ---°			MATERIAL NO. SEE CHART
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						