

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

**Part Number:** [0082285703](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch Round Conductor Flat Cable - 28 AWG (7 x 36) Stranded Tinned, 3 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 [6800](#)  
 Crimp Quality Equipment Yes  
 Geographic Area Asia  
 Product Name Ribbon

**Physical**

Cable Length 30.48m (100.0' )  
 Circuits (Loaded) 3  
 Insulation PVC  
 Packaging Type Reel  
 Pitch - Term. Interface (in) 0.050 In  
 Pitch - Term. Interface (mm) 1.27 mm  
 Temperature Range - Operating -20°C to +105°C  
 Wire Size AWG 28  
 Wire/Cable Type (7x36) Stranded, Tinned

**Electrical**

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

**Material Info**

Old Part Number 6800-03-100B

**Reference - Drawing Numbers**

Sales Drawing SD-6800-001



**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**

[6800Series](#)

**Use With**

[70121](#) MX-50™ Slimline Ribbon Cable.  
[90584](#) Picoflex® PF-50 IDT Receptacle



- 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>1</sub> : ADD NON-OPERATING TEMP.	07/11/23
A	N/A	NEW RELEASE	06/07/12
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

QUALITY SYMBOLS	DESCRIPTION
▼=3	
▽=0	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± ---
2 PLACES	± --- ± ---
1 PLACE	± --- ± ---
ANGULAR ± ---°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
CPANSAKHOM	2006/07/12
CHECKED BY	DATE
PMEECHAI	2006/07/12
APPROVED BY	DATE
SVIRATJAPOL	2006/07/12
MATERIAL NO.	
SEE CHART	
SIZE	
A 4	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	INCH	
TITLE		
FCB ROUND CONDUCTOR 1.27MM(.050)CENTERS PVC. 28AWG STR TINNED		
MOLEX INCORPORATED		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE CHART	SD-6800-001	1 OF 3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

E

E

SPECIFICATIONS

PHYSICAL

CONDUCTOR SPACING ----- 1.27(.050")  $\bar{C}$  TO  $\bar{C}$   
 WIRE GAUGE ----- 28 AWG(7/36) AWG, STRANDED TINNED  
 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

ELECTRICAL

CONDUCTOR RESISTANCE (D.C.) ----- 68 m OHMS/FT. MAX.  
 CHARACTERISTIC IMPEDANCE ----- 123 OHMS NOM. (GS)  
 100 OHMS NOM. (GSG)  
 CAPACITANCE ----- 9.1 pF/FT. NOM. (GS)  
 17.0 pF/FT. NOM. (GSG)  
 PROPAGATION DELAY ----- 1.4 ns/FT. NOM.  
 INSULATION RESISTANCE ----- 10M OHMS (10FT. SAMPLE)  
 DIELECTRIC WITHSTAND VOLTAGE ----- 2000 VRMS/MINUTE

GENERAL

$\Delta$  NON-OPERATING TEMPERATURE ----- -20°C TO 105°C  
 FAULTS AND/OR SPLICES ----- 1/REEL MAX. 100<sup>+3</sup><sub>0</sub> FT. (30.48<sup>+0.914</sup><sub>0</sub> M.)/REEL  
 20FT. (6.096M.) MIN. LENGTH

D

D

C

C

B

B

A

A

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 MM/IN		SCALE NTS	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY	DATE	TITLE			
			4 PLACES ± ---	± ---	CPANSAKHOM	2006/07/12	FCB ROUND CONDUCTOR 1.27MM(.050)CENTERS PVC. 28AWG STR TINNED			
			3 PLACES ± ---	± ---	CHECKED BY	DATE	MOLEX INCORPORATED			
			2 PLACES ± ---	± ---	PMEECHAI	2006/07/12	DOCUMENT NO. SD-6800-001			
		1 PLACE ± ---	± ---	APPROVED BY	DATE	SHEET NO. 2 OF 3				
		ANGULAR ± ---°		SVIRATJAPOL 2006/07/12						
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART						
				SIZE $\Delta$ 4		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

E D C B A

1

ENGINEERING NO.

6800-XX-XXXX

A B C D

A : CABLE 1.27mm. (.050") CENTERS 28AWG STRANDED TINNED  
 B : CONDUCTOR SIZE ( AVAILABLE 3 THROUGH 50 )  
 C : CABLE LENGTH 100FT. (30.48M.)  
 D : A = INCHES  
 B = FEET

1

2

3

4

5

6

ENG. NO.	NO.OF COND.	DIMENSIONS INCHES (MM)	DIM. W (REF)	ENGINEERING NO.	ORDER NO.
6800-3	3	2.54±0.18 (1.00±.007)	3.81(1.50)	6800-03-100B	82-28-5703
6800-4	4	3.81±0.18 (1.50±.007)	5.08(2.00)	6800-04-100B	82-28-5704
6800-5	5	5.08±0.18 (2.00±.007)	6.35(2.50)	6800-05-100B	82-28-5705
6800-6	6	6.35±0.18 (2.50±.007)	7.62(3.00)	6800-06-100B	82-28-5706
6800-7	7	7.62±0.18 (3.00±.007)	8.89(3.50)	6800-07-100B	82-28-5707
6800-8	8	8.89±0.18 (3.50±.007)	10.16(4.00)	6800-08-100B	82-28-5708
6800-9	9	10.16±0.18 (4.00±.007)	11.43(4.50)	6800-09-100B	82-28-5709
6800-10	10	11.43±0.18 (4.50±.007)	12.70(5.00)	6800-10-100B	82-28-5710
6800-11	11	12.70±0.18 (5.00±.007)	13.97(5.50)	6800-11-100B	82-28-5711
6800-12	12	13.97±0.18 (5.50±.007)	15.24(6.00)	6800-12-100B	82-28-5712
6800-13	13	15.24±0.18 (6.00±.007)	16.51(6.50)	6800-13-100B	82-28-5713
6800-14	14	16.51±0.18 (6.50±.007)	17.78(7.00)	6800-14-100B	82-28-5714
6800-15	15	17.78±0.18 (7.00±.007)	19.05(7.50)	6800-15-100B	82-28-5715
6800-16	16	19.05±0.23 (7.50±.009)	20.32(8.00)	6800-16-100B	82-28-5716
6800-17	17	20.32±0.23 (8.00±.009)	21.59(8.50)	6800-17-100B	82-28-5717
6800-18	18	21.59±0.23 (8.50±.009)	22.86(9.00)	6800-18-100B	82-28-5718
6800-19	19	22.86±0.23 (9.00±.009)	24.13(9.50)	6800-19-100B	82-28-5719
6800-20	20	24.13±0.23 (9.50±.009)	25.40(10.00)	6800-20-100B	82-28-5720
6800-21	21	25.40±0.23 (10.00±.009)	26.67(10.50)	6800-21-100B	82-28-5721
6800-22	22	26.67±0.23 (10.50±.009)	27.94(11.00)	6800-22-100B	82-28-5722
6800-23	23	27.94±0.23 (11.00±.009)	29.21(11.50)	6800-23-100B	82-28-5723
6800-24	24	29.21±0.23 (11.50±.009)	30.48(12.00)	6800-24-100B	82-28-5724
6800-25	25	30.48±0.23 (12.00±.009)	31.75(12.50)	6800-25-100B	82-28-5725
6800-26	26	31.75±0.23 (12.50±.009)	33.02(13.00)	6800-26-100B	82-28-5726
6800-27	27	33.02±0.23 (13.00±.009)	34.29(13.50)	6800-27-100B	82-28-5727
6800-28	28	34.29±0.23 (13.50±.009)	35.56(14.00)	6800-28-100B	82-28-5728
6800-29	29	35.56±0.23 (14.00±.009)	36.83(14.50)	6800-29-100B	82-28-5729
6800-30	30	36.83±0.23 (14.50±.009)	38.10(15.00)	6800-30-100B	82-28-5730
6800-31	31	38.10±0.23 (15.00±.009)	39.37(15.50)	6800-31-100B	82-28-5731
6800-32	32	39.37±0.23 (15.50±.009)	40.64(16.00)	6800-32-100B	82-28-5732
6800-33	33	40.64±0.23 (16.00±.009)	41.91(16.50)	6800-33-100B	82-28-5733
6800-34	34	41.91±0.23 (16.50±.009)	43.18(17.00)	6800-34-100B	82-28-5734
6800-35	35	43.18±0.23 (17.00±.009)	44.45(17.50)	6800-35-100B	82-28-5735
6800-36	36	44.45±0.23 (17.50±.009)	45.72(18.00)	6800-36-100B	82-28-5736
6800-37	37	45.72±0.28 (18.00±.011)	46.99(18.50)	6800-37-100B	82-28-5737
6800-38	38	46.99±0.28 (18.50±.011)	48.26(19.00)	6800-38-100B	82-28-5738
6800-39	39	48.26±0.28 (19.00±.011)	49.53(19.50)	6800-39-100B	82-28-5739
6800-40	40	49.53±0.28 (19.50±.011)	50.80(20.00)	6800-40-100B	82-28-5740
6800-41	41	50.80±0.28 (20.00±.011)	52.07(20.50)	6800-41-100B	82-28-5741
6800-42	42	52.07±0.28 (20.50±.011)	53.34(21.00)	6800-42-100B	82-28-5742
6800-43	43	53.34±0.28 (21.00±.011)	54.61(21.50)	6800-43-100B	82-28-5743
6800-44	44	54.61±0.28 (21.50±.011)	55.88(22.00)	6800-44-100B	82-28-5744
6800-45	45	55.88±0.28 (22.00±.011)	57.15(22.50)	6800-45-100B	82-28-5745
6800-46	46	57.15±0.28 (22.50±.011)	58.42(23.00)	6800-46-100B	82-28-5746
6800-47	47	58.42±0.28 (23.00±.011)	59.69(23.50)	6800-47-100B	82-28-5747
6800-48	48	59.69±0.28 (23.50±.011)	60.96(24.00)	6800-48-100B	82-28-5748
6800-49	49	60.96±0.28 (24.00±.011)	62.23(24.50)	6800-49-100B	82-28-5749
6800-50	50	62.23±0.28 (24.50±.011)	63.50(25.00)	6800-50-100B	82-28-5750

THIRD ANGLE PROJECTION

DESIGN UNITS INCH

SCALE NTS

DIMENSION STYLE MM/IN

GENERAL TOLERANCES (UNLESS SPECIFIED)

QUALITY SYMBOLS

TITLE  
 FCB ROUND CONDUCTOR  
 1.27MM(.050)CENTERS PVC.  
 28AWG STR TINNED

APPROVED BY SVIRATJAPOL 2006/07/12

MATERIAL NO. SEE CHART DOCUMENT NO. SD-6800-001 SHEET NO. 3 OF 3

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	mm	INCH
4 PLACES	+ .004	+ .0015
3 PLACES	+ .003	+ .0010
2 PLACES	+ .002	+ .0005
1 PLACE	+ .001	+ .0002
ANGULAR ±.005°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

REV	DESCRIPTION
B	APPR:SVIRATJAPOL 2007/11/12/04
A	CHKD:JWARINTARA 2007/11/11/29
	DRWN:CPANSAKHOM 2007/11/11/29
	SEE CHANGE DETAIL. 05-000-002-THL:ON EC