

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

**Part Number:** [0082285731](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch Round Conductor Flat Cable - 28 AWG (7 x 36) Stranded Tinned, 31 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) 31  
 Circuits (maximum) 31  
 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 6800-31-100B

**Reference - Drawing Numbers**

Sales Drawing SD-6800-001



**EU RoHS** **China RoHS**

**Compliance Status**

**Not Reviewed**

**REACH SVHC**

**Not Reviewed**

**Halogen-Free**

**Status**

**Not Reviewed**

**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

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- 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	

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

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

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			
					MM/IN	NTS	INCH					
		$\blacktriangledown$ =	mm	INCH	DRAWN BY	DATE	TITLE					
		$\triangleleft$ =	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	MATERIAL NO.							
	1 PLACE ± ---	± ---	APPROVED BY	DATE	DOCUMENT NO.							
	ANGULAR ± ---°		SVIRATJAPOL	2006/07/12	SHEET NO.							
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-6800-001							
			SIZE $\Delta$ 4		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

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

ENG. NO.	NO.OF COND.	DIMENSIONS INCHES (MM)		DIM. W (REF)	ENGINEERING NO.	ORDER NO.
		S	S			
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	

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

REV	DESCRIPTION
B	DRWN:CPANSAKHOM 2007/11/12/04 CHKD:JWARINTARA 2007/11/11/29 APPR:SVIRATJAPOL 2007/11/12/04
SEE CHANGE DETAIL. 515 00-008-002 HL TH: ON EC	