

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

**Part Number:** **0082285738**  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch Round Conductor Flat Cable - 28 AWG (7 x 36) Stranded Tinned, 38 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) 38  
 Circuits (maximum) 38  
 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 6800-38-100B

**Reference - Drawing Numbers**

Sales Drawing SD-6800-001



**EU RoHS**

**Compliance Status**

**Not Reviewed**

**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

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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/IN       |
| 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<br>1.27MM(.050)CENTERS PVC.<br>28AWG STR TINNED |              |                        |
| MOLEX INCORPORATED  |              |                        |
| MATERIAL NO.  | DOCUMENT NO. | SHEET NO.              |
| SEE CHART   | SD-6800-001  | 1 OF 3                 |

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

C

B

A

|   |                    |  |       |                                       |             |                 |            |   |   |                        |  |  |  |  |
|---|--------------------|--|-------|---------------------------------------|-------------|-----------------|------------|---|---|------------------------|--|--|--|--|
| SEE CHANGE DETAIL.<br>EC NO: THL2008-0015<br>DRWN: CPANSAKHOM 2007/11/28<br>CHKD: DNARINTARA 2007/11/29<br>APPR: SVIRATJAPOL 2007/12/04 | DESCRIPTION<br>REV | QUALITY SYMBOLS                                      |       | GENERAL TOLERANCES (UNLESS SPECIFIED) |             | DIMENSION STYLE |            | SCALE   | DESIGN UNITS  | THIRD ANGLE PROJECTION |  |  |  |  |
|   |                    |  |       |                                       |             | MM/IN           |            | NTS   | INCH  |                        |  |  |  |  |
|   |                    | ▽ =<br>▽ =   |       | mm                                    | INCH        | DRAWN BY        | DATE       | TITLE   |   |                        |  |  |  |  |
|   |                    |  |       | 4 PLACES                              | ± ---       | ± ---           | CPANSAKHOM | 2006/07/12  | FCB ROUND CONDUCTOR<br>1.27MM(.050)CENTERS PVC.<br>28AWG STR TINNED |                        |  |  |  |  |
|   |                    |  |       | 3 PLACES                              | ± ---       | ± ---           | CHECKED BY | DATE  | MOLEX INCORPORATED  |                        |  |  |  |  |
|   |                    | 2 PLACES   | ± --- | ± ---                                 | PMEECHAI    | 2006/07/12      |            |   |   |                        |  |  |  |  |
|   |                    | 1 PLACE  | ± --- | ± ---                                 | APPROVED BY | DATE            |            |   |   |                        |  |  |  |  |
|   |                    | ANGULAR ± ---°                                       |       | SVIRATJAPOL                           |             | 2006/07/12      |            |   |   |                        |  |  |  |  |
|   |                    | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |       |                                       |             | MATERIAL NO.    |            | DOCUMENT NO.  |   | SHEET NO.              |  |  |  |  |
|   |                    |  |       |                                       |             | SEE CHART       |            | SD-6800-001   |   | 2 OF 3                 |  |  |  |  |
|   |                    |  |       |                                       |             | 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

3

4

4

5

5

6

6

7

| 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 (1.000±.009) | 26.67(1.050) | 6800-21-100B | 82-28-5721      |           |
| 6800-22  | 22          | 26.67±0.23 (1.050±.009) | 27.94(1.100) | 6800-22-100B | 82-28-5722      |           |
| 6800-23  | 23          | 27.94±0.23 (1.100±.009) | 29.21(1.150) | 6800-23-100B | 82-28-5723      |           |
| 6800-24  | 24          | 29.21±0.23 (1.150±.009) | 30.48(1.200) | 6800-24-100B | 82-28-5724      |           |
| 6800-25  | 25          | 30.48±0.23 (1.200±.009) | 31.75(1.250) | 6800-25-100B | 82-28-5725      |           |
| 6800-26  | 26          | 31.75±0.23 (1.250±.009) | 33.02(1.300) | 6800-26-100B | 82-28-5726      |           |
| 6800-27  | 27          | 33.02±0.23 (1.300±.009) | 34.29(1.350) | 6800-27-100B | 82-28-5727      |           |
| 6800-28  | 28          | 34.29±0.23 (1.350±.009) | 35.56(1.400) | 6800-28-100B | 82-28-5728      |           |
| 6800-29  | 29          | 35.56±0.23 (1.400±.009) | 36.83(1.450) | 6800-29-100B | 82-28-5729      |           |
| 6800-30  | 30          | 36.83±0.23 (1.450±.009) | 38.10(1.500) | 6800-30-100B | 82-28-5730      |           |
| 6800-31  | 31          | 38.10±0.23 (1.500±.009) | 39.37(1.550) | 6800-31-100B | 82-28-5731      |           |
| 6800-32  | 32          | 39.37±0.23 (1.550±.009) | 40.64(1.600) | 6800-32-100B | 82-28-5732      |           |
| 6800-33  | 33          | 40.64±0.23 (1.600±.009) | 41.91(1.650) | 6800-33-100B | 82-28-5733      |           |
| 6800-34  | 34          | 41.91±0.23 (1.650±.009) | 43.18(1.700) | 6800-34-100B | 82-28-5734      |           |
| 6800-35  | 35          | 43.18±0.23 (1.700±.009) | 44.45(1.750) | 6800-35-100B | 82-28-5735      |           |
| 6800-36  | 36          | 44.45±0.23 (1.750±.009) | 45.72(1.800) | 6800-36-100B | 82-28-5736      |           |
| 6800-37  | 37          | 45.72±0.28 (1.800±.011) | 46.99(1.850) | 6800-37-100B | 82-28-5737      |           |
| 6800-38  | 38          | 46.99±0.28 (1.850±.011) | 48.26(1.900) | 6800-38-100B | 82-28-5738      |           |
| 6800-39  | 39          | 48.26±0.28 (1.900±.011) | 49.53(1.950) | 6800-39-100B | 82-28-5739      |           |
| 6800-40  | 40          | 49.53±0.28 (1.950±.011) | 50.80(2.000) | 6800-40-100B | 82-28-5740      |           |
| 6800-41  | 41          | 50.80±0.28 (2.000±.011) | 52.07(2.050) | 6800-41-100B | 82-28-5741      |           |
| 6800-42  | 42          | 52.07±0.28 (2.050±.011) | 53.34(2.100) | 6800-42-100B | 82-28-5742      |           |
| 6800-43  | 43          | 53.34±0.28 (2.100±.011) | 54.61(2.150) | 6800-43-100B | 82-28-5743      |           |
| 6800-44  | 44          | 54.61±0.28 (2.150±.011) | 55.88(2.200) | 6800-44-100B | 82-28-5744      |           |
| 6800-45  | 45          | 55.88±0.28 (2.200±.011) | 57.15(2.250) | 6800-45-100B | 82-28-5745      |           |
| 6800-46  | 46          | 57.15±0.28 (2.250±.011) | 58.42(2.300) | 6800-46-100B | 82-28-5746      |           |
| 6800-47  | 47          | 58.42±0.28 (2.300±.011) | 59.69(2.350) | 6800-47-100B | 82-28-5747      |           |
| 6800-48  | 48          | 59.69±0.28 (2.350±.011) | 60.96(2.400) | 6800-48-100B | 82-28-5748      |           |
| 6800-49  | 49          | 60.96±0.28 (2.400±.011) | 62.23(2.450) | 6800-49-100B | 82-28-5749      |           |
| 6800-50  | 50          | 62.23±0.28 (2.450±.011) | 63.50(2.500) | 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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

|                |        |         |
|----------------|--------|---------|
|                | 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   |
| A   | CHKD:DNARINTARA 2007/11/11/29 |
|     | DRWN:CPANSAKHOM 2007/11/11/29 |

SEE CHANGE DETAIL.