



**Distributor of Molex Connector Corporation: Excellent Integrated System Limited**  
Datasheet of 0873814063 - Connector Receptacle 40 Position 0.079" (2.00mm) Gold Surface Mount

Contact us: [sales@integrated-circuit.com](mailto:sales@integrated-circuit.com) Website: [www.integrated-circuit.com](http://www.integrated-circuit.com)

---

## **Excellent Integrated System Limited**

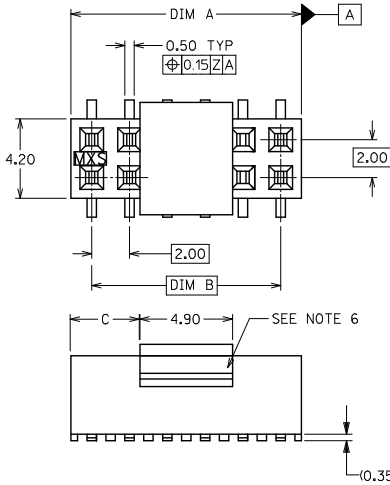
Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Molex Connector Corporation](#)  
[0873814063](#)

For any questions, you can email us directly:  
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



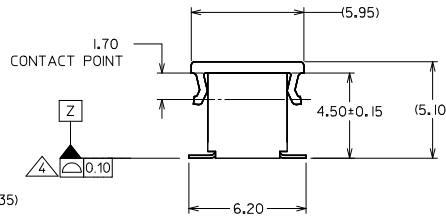
**PART NO. LEGEND**  
FOR TUBE PACKAGING ONLY

87381 - \* \* \* \*

CIRCUIT SIZE      PLATING (SEE NOTE 1)

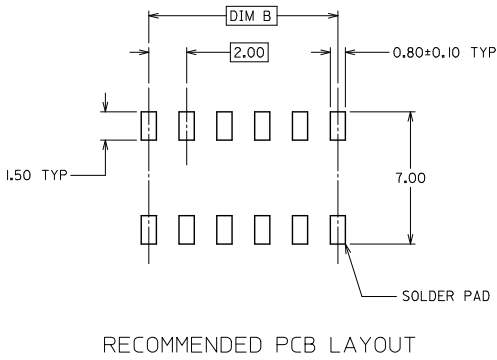
3  
4  
5

6 COVER  
7 NO COVER



**NOTES:**

- PLATING FINISH:
  - 0.76um MIN. GOLD IN CONTACT AREA 1.27um MIN. TIN IN SOLDER TAIL AREA BOTH OVER 1.27um MIN. NICKEL OVERALL
  - 0.38um MIN. GOLD IN CONTACT AREA 1.27um MIN. TIN IN SOLDER TAIL AREA BOTH OVER 1.27um MIN. NICKEL OVERALL
  - 0.05um MIN. GOLD FLASH IN CONTACT AREA 1.90um MIN. TIN IN SOLDER TAIL AREA BOTH OVER 1.27um MIN. NICKEL OVERALL
- 12 CKT SIZE SHOWN FOR ASSY ILLUSTRATION ONLY. (SEE CHART FOR ALL PART SIZES). 6 CKT & 30 CKT ILLUSTRATED FOR TAPE/REEL VERSION ON SHT 2.
- PRODUCT SPECIFICATION PS-87380 APPLIES. COPLANARITY OF SOLDER TAILS ARE TO BE MEASURED BY RESTING THE PART ON A FLAT GAUGE SURFACE ↑+0.05 UPWARDS AND ↓-0.05 DOWNWARDS.
- TUBE PACKAGING STANDARD.
- COVER IS OPTIONAL. SEE LEGEND.
- PARTS SHALL BE PACKED IN MOISTURE BARRIER BAG.
- REFER SHT 3 FOR P/N: 87381-6000 T&R ILLUSTRATION.

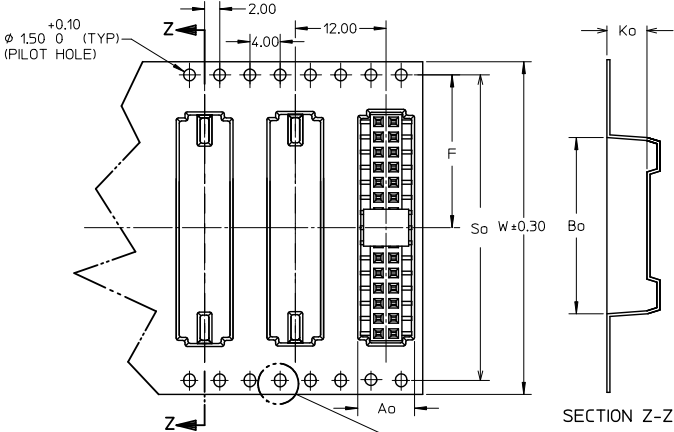


RECOMMENDED PCB LAYOUT

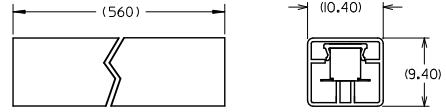
| REV | DESCRIPTION            | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED)                |       | DIMENSION STYLE   |            | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION                   |
|-----|------------------------|-----------------|--|-------|-------------------|------------|-------|--------------|--|
|     |                        |                 | mm   | INCH  | MM ONLY           | DATE       |       |              |  |
| 4   | REVISE NOTE 4.         | ∇=0             | 4 PLACES ± ---                                       | ± --- | DRAWN BY JAMES    | 1998/01/08 | NTS   | METRIC       | MGRID, TOP ENTRY RECEPT. 4.50MM HT., SMT |
| 3   | EC. NO. S2012-0026     | ∇=0             | 3 PLACES ± ---                                       | ± --- | CHECKED BY LCHANG | 1999/04/23 |       |              |  |
| 2   | DRWNSKANG 2011/07/29   | ∇=0             | 2 PLACES ± 0.20                                      | ± --- | APPROVED BY SQUEK | 1999/04/26 |       |              | MOLEX INCORPORATED                       |
| 1   | CHKCHAI SEE 2011/08/03 | ∇=0             | 1 PLACE ± ---  | ± --- | MATERIAL NO.      |            |       |              |  |
|     | APPR:MLONG 2011/08/03  |                 | ANGULAR ± 3°   |       | SEE TABLE         |            |       |              | DOCUMENT NO. SD-87381-***6*              |
|     |                        |                 | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |       | SIZE A            |            |       |              | SHEET NO. 1 OF 4                         |

| PART NUMBER | CKT. SIZE | DIM A | DIM B | DIM C |
|-------------|-----------|-------|-------|-------|
| 87381-06**  | 6         | 6.00  | 4.00  | 0.55  |
| 87381-08**  | 8         | 8.00  | 6.00  | 1.55  |
| 87381-10**  | 10        | 10.00 | 8.00  | 2.55  |
| 87381-12**  | 12        | 12.00 | 10.00 | 3.55  |
| 87381-14**  | 14        | 14.00 | 12.00 | 4.55  |
| 87381-16**  | 16        | 16.00 | 14.00 | 5.55  |
| 87381-18**  | 18        | 18.00 | 16.00 | 6.55  |
| 87381-20**  | 20        | 20.00 | 18.00 | 7.55  |
| 87381-22**  | 22        | 22.00 | 20.00 | 8.55  |
| 87381-24**  | 24        | 24.00 | 22.00 | 9.55  |
| 87381-26**  | 26        | 26.00 | 24.00 | 10.55 |
| 87381-28**  | 28        | 28.00 | 26.00 | 11.55 |
| 87381-30**  | 30        | 30.00 | 28.00 | 12.55 |
| 87381-32**  | 32        | 32.00 | 30.00 | 13.55 |
| 87381-34**  | 34        | 34.00 | 32.00 | 14.55 |
| 87381-36**  | 36        | 36.00 | 34.00 | 15.55 |
| 87381-38**  | 38        | 38.00 | 36.00 | 16.55 |
| 87381-40**  | 40        | 40.00 | 38.00 | 17.55 |
| 87381-42**  | 42        | 42.00 | 40.00 | 18.55 |
| 87381-44**  | 44        | 44.00 | 42.00 | 19.55 |
| 87381-46**  | 46        | 46.00 | 44.00 | 20.55 |
| 87381-48**  | 48        | 48.00 | 46.00 | 21.55 |
| 87381-50**  | 50        | 50.00 | 48.00 | 22.55 |

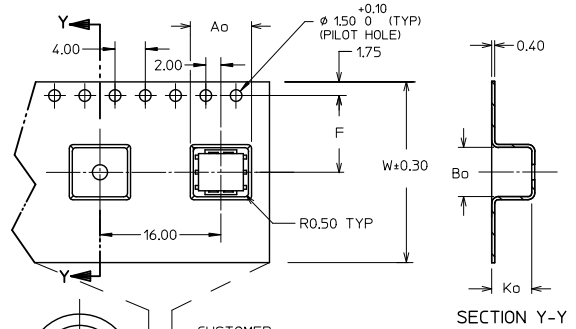
Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



CONNECTOR ORIENTATION  
IN TUBE

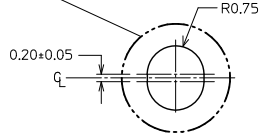


SECTION Z-Z

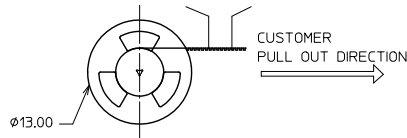


SECTION Y-Y

30 CKT FOR ILLUSTRATION ONLY  
TAPE & REEL TYPE 'B'



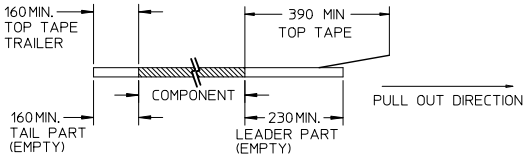
6 CKT FOR ILLUSTRATION ONLY  
TAPE & REEL TYPE 'A'



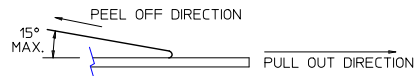
CUSTOMER  
PULL OUT DIRECTION

**NOTES:**

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf.  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



3. PACKAGING STANDARD IS AS PER EIA-481.

4. TAPE & REEL QUANTITY = SEE TABLE

|   |            |             |                 |                                       |      |                 |     |        |              |                        |
|---|------------|-------------|-----------------|---------------------------------------|------|-----------------|-----|--------|--------------|------------------------|
| REVISE NOTE 4.<br>EC NO. S2012-0026<br>DRAWN BY DRWNSKANG<br>CHKD BY SEE<br>APPR: HLONG | 2011/07/29 | DESCRIPTION | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) |      | DIMENSION STYLE |     | SCALE  | DESIGN UNITS | THIRD ANGLE PROJECTION |
|   | 2011/08/03 |             |                 | mm                                    | INCH | MM ONLY         | NTS | METRIC |              |                        |
| REV   | E11        |             |                 | 4 PLACES                              | ±    | ---             | --- |        |              |                        |
|   |            |             |                 | 3 PLACES                              | ±    | ---             | --- |        |              |                        |
|   |            |             |                 | 2 PLACES                              | ±    | 0.20            | --- |        |              |                        |
|   |            |             |                 | 1 PLACE                               | ±    | ---             | --- |        |              |                        |
|   |            |             |                 | ANGULAR                               |      | ±               | 3 ° |        |              |                        |

|   |                                |  |
|---|--------------------------------|--|
| DRAWN BY<br>JAMES<br>1998/01/08<br>CHECKED BY<br>LCHANG<br>1999/04/23<br>APPROVED BY<br>SQUEK<br>1999/04/26 | DATE                           | TITLE<br>MGRID, TOP ENTRY RECEPT.<br>4.50MM HT., SMT |
|   | DATE                           |  |
|   | DATE                           |  |
| MATERIAL NO.<br>SEE TABLE   | DOCUMENT NO.<br>SD-87381-***6* | MOLEX INCORPORATED                                   |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  |                                | SHEET NO.<br>2 OF 4                                  |

|  |  |  |
|--|--|--|
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |
|--|--|--|

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

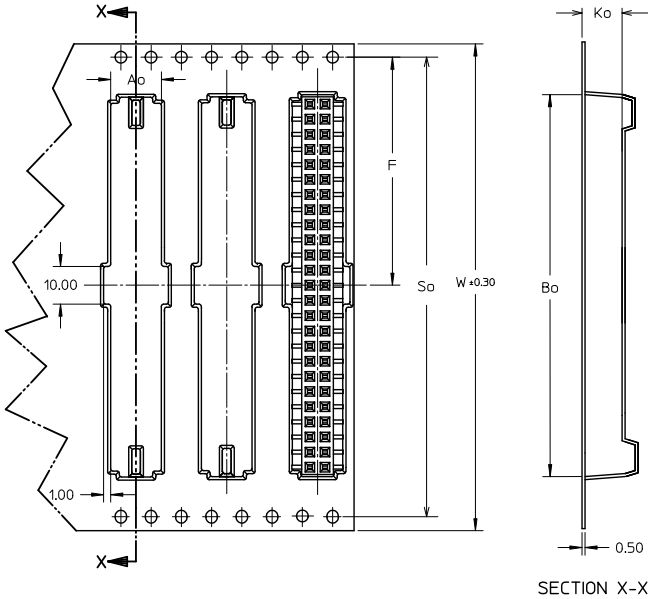
| CKT SIZE | PART NO. WITH CAP IN TUBE | PART NO. WITH CAP IN TAPE / REEL | W  | So    | Ao   | F     | Bo    | Ko   | T&R TYPE (SHT 2) | T&R QTY PER REEL |
|----------|---------------------------|----------------------------------|----|-------|------|-------|-------|------|------------------|------------------|
| 6        | 87381-0664                | 87381-9002                       | 24 | -     | 7.00 | 11.50 | 6.50  | 5.30 | A                | 500              |
| 8        | 87381-0864                | 87381-9003                       | 24 | -     | 7.00 | 11.50 | 8.50  | 5.30 | A                | 600              |
| 10       | 87381-1064                | 87381-9005                       | 24 | -     | 7.00 | 11.50 | 10.50 | 5.30 | A                | 680              |
| 14       | 87381-1464                | 87381-9006                       | 32 | 28.40 | 7.20 | 14.20 | 14.50 | 5.30 | B                | 750              |
| 16       | 87381-1664                | 87381-9004                       | 32 | 28.40 | 7.20 | 14.20 | 16.50 | 5.30 | B                | 800              |
| 18       | 87381-1864                | 87381-1800                       | 32 | 28.40 | 7.20 | 14.20 | 18.50 | 5.30 | B                | 750              |
| 20       | 87381-2063                | 87381-2000                       | 32 | 28.40 | 7.20 | 14.20 | 20.50 | 5.30 | B                | 800              |
| 22       | 87381-2264                | 87381-2200                       | 44 | 40.40 | 7.20 | 20.20 | 22.50 | 5.30 | B                | 500              |
| 30       | 87381-3064                | 87381-3000                       | 44 | 40.40 | 7.20 | 20.20 | 30.50 | 5.30 | B                | 500              |
| 32       | 87381-3264                | 87381-3200                       | 44 | 40.40 | 7.20 | 20.20 | 32.50 | 5.30 | B                | 500              |
| 34       | 87381-3464                | 87381-3400                       | 56 | 52.40 | 7.20 | 26.20 | 34.50 | 5.30 | B                | 500              |
| 44       | 87381-4464                | 87381-4400                       | 56 | 52.40 | 7.20 | 26.20 | 44.50 | 5.30 | B                | 500              |
| 46       | 87381-4664                | 87381-4600                       | 72 | 68.40 | 7.20 | 34.20 | 46.50 | 5.30 | B                | 750              |
| 50       | 87381-5063                | 87381-5030                       | 72 | 68.40 | 7.20 | 34.20 | 50.50 | 5.30 | B                | 500              |
| 50       | 87381-5064                | 87381-5000                       | 72 | 68.40 | 7.20 | 34.20 | 50.50 | 5.30 | B                | 500              |

|   |                       |                                       |   |   |              |                        |
|---|-----------------------|---------------------------------------|---|---|--------------|------------------------|
| REVISE NOTE 4.<br>EC NO: S2012-0026<br>DRAWN: KWANG<br>CHK: DATSEE<br>APPR: HLONG<br>2011/07/29<br>2011/08/03<br>2011/08/03 | QUALITY SYMBOLS       | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE   | SCALE                                       | DESIGN UNITS | THIRD ANGLE PROJECTION |
|   | DESCRIPTION           | mm INCH                               | MM ONLY   | NTS   | METRIC       |                        |
|   | ▽=0                   | 4 PLACES ± --- ± ---                  | DRAWN BY DATE   | TITLE                                       |              |                        |
|   | ▽=0                   | 3 PLACES ± --- ± ---                  | JAMES 1998/01/08  | MGRID, TOP ENTRY RECEPT.<br>4.50MM HT., SMT |              |                        |
| ▽=0   | 2 PLACES ± 0.20 ± --- | CHECKED BY DATE                       | MOLEX INCORPORATED  |   |              |                        |
|   | 1 PLACE ± --- ± ---   | LCHANG 1999/04/23                     | DOCUMENT NO.  |   |              |                        |
|   | ANGULAR ± 3 °         | APPROVED BY DATE                      | SD-87381-***6*  |   |              |                        |
|   |                       | SOUK 1999/04/26                       | SHEET NO.   |   |              |                        |
|   |                       | MATERIAL NO.                          | 3 OF 4  |   |              |                        |
|   |                       | SEE TABLE                             | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |              |                        |

Contact us: [sales@integrated-circuit.com](mailto:sales@integrated-circuit.com) Website: [www.integrated-circuit.com](http://www.integrated-circuit.com)

| CKT SIZE | PART NO. WITHOUT CAP IN TUBE | PART NO. WITHOUT CAP IN TAPE / REEL | W  | So    | Ao   | F     | Bo    | Ko   | T&R TYPE (SHT 2) | T&R QTY PER REEL |
|----------|------------------------------|-------------------------------------|----|-------|------|-------|-------|------|------------------|------------------|
| 50       | 87381-5074                   | 87381-6000                          | 72 | 68.40 | 6.80 | 34.20 | 50.50 | 8.00 | B                | 500              |

ILLUSTRATION FOR P/N: 87381-6000  
50 CKT IN T&R W/O CAP



SECTION X-X

|  |   |  |  |                  |              |                        |
|--|---|--|--|------------------|--------------|------------------------|
| <b>REVISE NOTE 4.</b><br>EC. NO. S2012-0026 2011/07/29<br>DRAWN:KANG<br>CHK:CATSEE 2011/08/03<br>APPR:MLONG 2011/08/03 | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED)  | DIMENSION STYLE  | SCALE            | DESIGN UNITS | THIRD ANGLE PROJECTION |
|  | $\nabla=0$<br>$\nabla=0$<br>$\nabla=0$                            | mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.20 ± ---<br>1 PLACE ± --- ± ---<br>ANGULAR ± 3 ° | MM ONLY  | NTS              | METRIC       |                        |
|  | DESCRIPTION   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | DRAWN BY: JAMES DATE: 1998/01/08<br>CHECKED BY: LCHANG DATE: 1999/04/23<br>APPROVED BY: SQUEK DATE: 1999/04/26 | TITLE            | MATERIAL NO. | DOCUMENT NO.           |
|  | MGRID, TOP ENTRY RECEPT.<br>4.50MM HT., SMT<br>MOLEX INCORPORATED | SEE TABLE  | SD-87381-***6*   | SHEET NO. 4 OF 4 |              |                        |