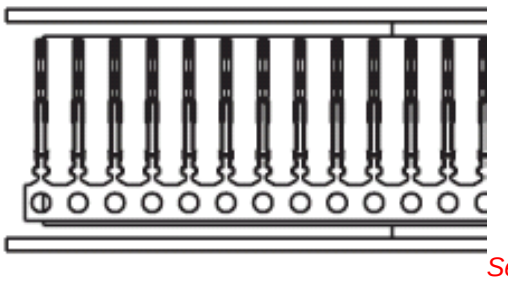
This document was generated on 05/20/2010

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

**Part Number:** 0830009503
**Status:** Active
**Overview:** commercial_microd
**Description:** 1.27mm (.050") Pitch Ulti-Mate™ Commerical Micro D, Cable Receptacle Kit, 9|25|15 Circuits



*Series image - Reference only*

**Documents:**
Packaging Specification (PDF)
Drawing (PDF)
RoHS Certificate of Compliance (PDF)

## General

| | |
|---|---|
| Product Family | I/O Connectors |
| Series | 83000 |
| Application | Wire-to-Board |
| Component Type | Receptacle |
| Overview | commercial_microd |
| Product Literature Order No | USA-063 |
| Product Name | Commercial Micro-D |
| Type | N/A |

## Physical

| | |
|---|---|
| Circuits (Loaded) | 1 |
| Circuits (maximum) | 1 |
| Durability (mating cycles max) | 500 |
| Lock to Mating Part | Yes |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin |
| Orientation | N/A |
| PCB Retention | N/A |
| Packaging Type | Reel |
| Panel Mount | No |
| Pitch - Mating Interface (in) | 0.050 In |
| Pitch - Mating Interface (mm) | 1.27 mm |
| Plating min: Mating (µin) | 5 |
| Plating min: Mating (µm) | 0.125 |
| Plating min: Termination (µin) | 50 |
| Plating min: Termination (µm) | 1.25 |
| Polarized to Mating Part | Yes |
| Surface Mount Compatible (SMC) | N/A |
| Temperature Range - Operating | -55°C to +70°C |
| Termination Interface: Style | Crimp or Compression |
| Wire Size AWG | 26, 28 |

## Electrical

| | |
|---|---|
| Current - Maximum per Contact | 3A |
| Shielded | Yes |
| Voltage - Maximum | 350V |

## Material Info

## Reference - Drawing Numbers

| | |
|---|---|
| Packaging Specification | PK-83000-005 |
| Sales Drawing | SD-83000-002 |

**EU RoHS**
**ELV and RoHS Compliant**
**REACH SVHC**
**Contains SVHC: No**
**Halogen-Free Status**
**Halogen-Free**

**China RoHS**

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

Email 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**
83000Series

**Mates With**
83611 , 83619 , 83612 , 83614

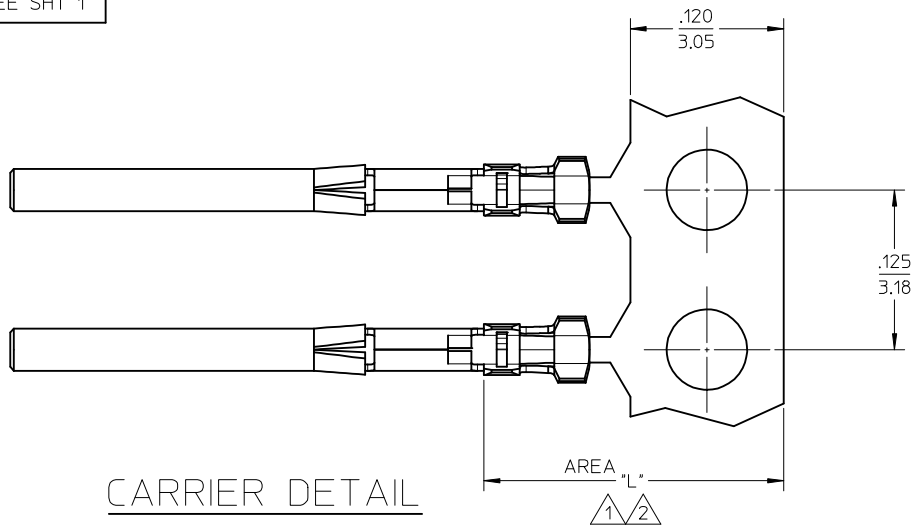
**Application Tooling** | **FAQ**
*Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.*
**Global**

| Description | Product # |
|---|---|
| Hand Crimp Tool | 0638114800 |
| T2 Terminator Die | 0638522000 |
| FineAdjust™ Applicator | 0638622000 |

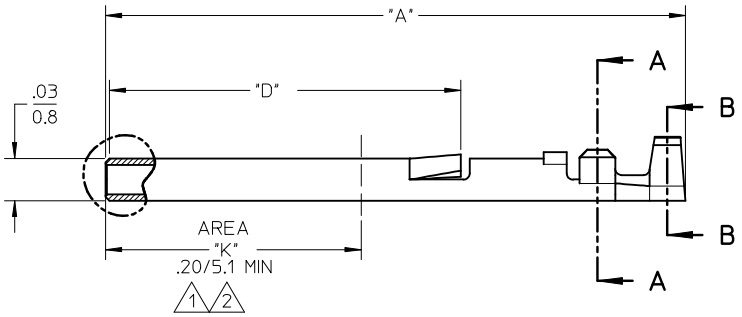
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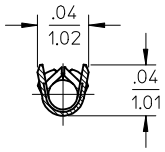
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

| MATERIAL NUMBER | ENGINEERING NUMBER |
|---|---|
| SEE SHT 1 | SEE SHT 1 |

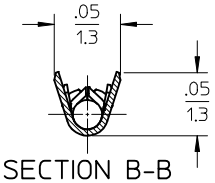



CARRIER DETAIL




SECTION A-A
SCALE: NONE




SECTION B-B
SCALE: NONE

SALES DRAWING

REDRAWN
EC NO: WNA2008-0145 2008/10/17
DRWN:BRUPERT
CHKD:
APPR: JFMURPHY 2008/11/12
DESCRIPTION
REV
K1

QUALITY SYMBOLS
▼=0
Ⓒ=0

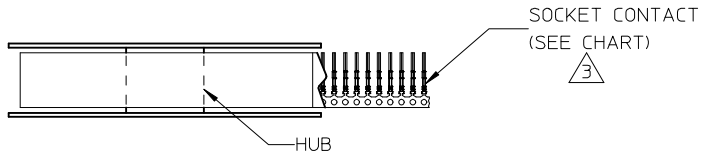
| GENERAL TOLERANCES (UNLESS SPECIFIED) | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± .005 |
| 2 PLACES | ± 0.13 | ± .010 |
| 1 PLACE | ± 0.3 | ± --- |
| ANGULAR ±1/2° | | |

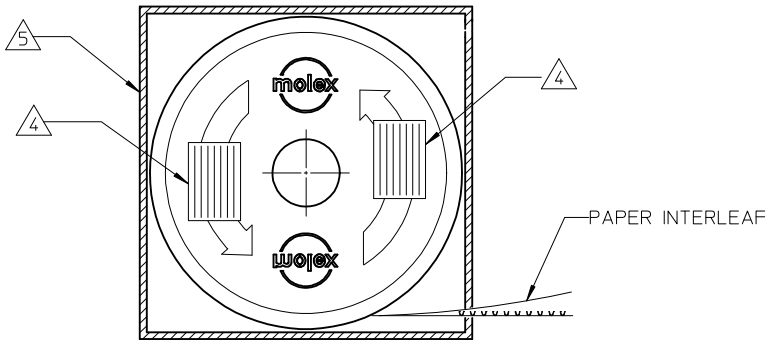
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

| | |
|---|---|
| DIMENSION STYLE | IN/MM |
| SCALE | 10:1 |
| DESIGN UNITS | INCH |
| | THIRD ANGLE PROJECTION |
| DRAWN BY | BRE |
| DATE | 02/01/22 |
| CHECKED BY | HEB |
| DATE | 02/01/22 |
| APPROVED BY | RWD |
| DATE | 02/01/22 |
| MATERIAL NO. | SEE CHART |
| TITLE | CONTACT, SOCKET, COMM. MICRO-D |
| | MOLEX INCORPORATED |
| DOCUMENT NO. | SD-83000-002 |
| SHEET NO. | 1 OF 2 |
| SIZE | A3 |

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

| MATERIAL NUMBER | ENGINEERING NUMBER | DESCRIPTION | FINISH | A | D |
|---|---|---|---|---|---|
| 830009502 | 83000-9502 | 2.5 K PER REEL | 1 | .456/(11.58) (SEE SHT 2) | .278/(7.06) (SEE SHT 2) |
| 830009503 | 83000-9503 | 50.0 K PER REEL | 1 | | |
| 830000083 | 83000-0083 | LOOSE PIECE TERMINAL | 1 | | |
| 830009550 | 83000-9550 | 2.5 K PER REEL | 2 | | |
| 830009547 | 83000-9547 | 2.5 K PER REEL | 1 | .426/(10.82) (SEE SHT 2) | .248/(6.30) (SEE SHT 2) |
| 830000106 | 83000-0106 | LOOSE PIECE TERMINAL | 1 | | |
| 830009557 | 83000-9557 | 50.0 K PER REEL | 2 | .456/(11.58) | .278/(7.06) |




NOTES:

1 FINISH:

A. NICKEL PLATING 50u IN MIN THICKNESS OVERALL, PER QQ-N-290, CLASS 2.
B. FOLLOWED BY 30u IN MIN. GOLD PER MIL-G-45204, TYPE II,GRADE C, IN AREA "K".(SHOWN ON SHT 2)
C. FOLLOWED BY 5-10u IN GOLD PER MIL-G-45204, TYPE II, GRADE C IN AREA "K".
D. FOLLOWED BY 50u IN TIN PER MIL-T-10727, TYPE I IN AREA "L".(SHOWN ON SHEET 2).

2 FINISH: (830009550 & 830009557)

A. NICKEL PLATING 50u IN MIN THICKNESS OVERALL, PER QQ-N-290, CLASS 2.
B. FOLLOWED BY 50u IN MIN. GOLD PER MIL-G-45204, TYPE II,GRADE C,IN AREA "K".(SEE SHEET 2)
C. FOLLOWED BY 50u IN TIN PER MIL-T-10727, TYPE I IN AREA "L".(SHOWN ON SHEET 2).

3 CONTACT TO BE ORIENTATED AS SHOWN.

4 IDENTIFICATION LABELS (2),(REEL).

5 IDENTIFICATION LABEL,(SHIPPING BOX).

SALES DRAWING

REDRAWN
EC NO: WNA2008-0145 2008/10/17
DRWN:BRUPERT
CHKD:
APPR: JFMURPHY 2008/11/12
DESCRIPTION
REV
K1

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± .005 |
| 2 PLACES | ± 0.13 | ± .010 |
| 1 PLACE | ± 0.3 | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 10:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: BRE DATE: 02/01/22
CHECKED BY: HEB DATE: 02/01/22
APPROVED BY: RWD DATE: 02/01/22

TITLE: CONTACT, SOCKET, COMM. MICRO-D

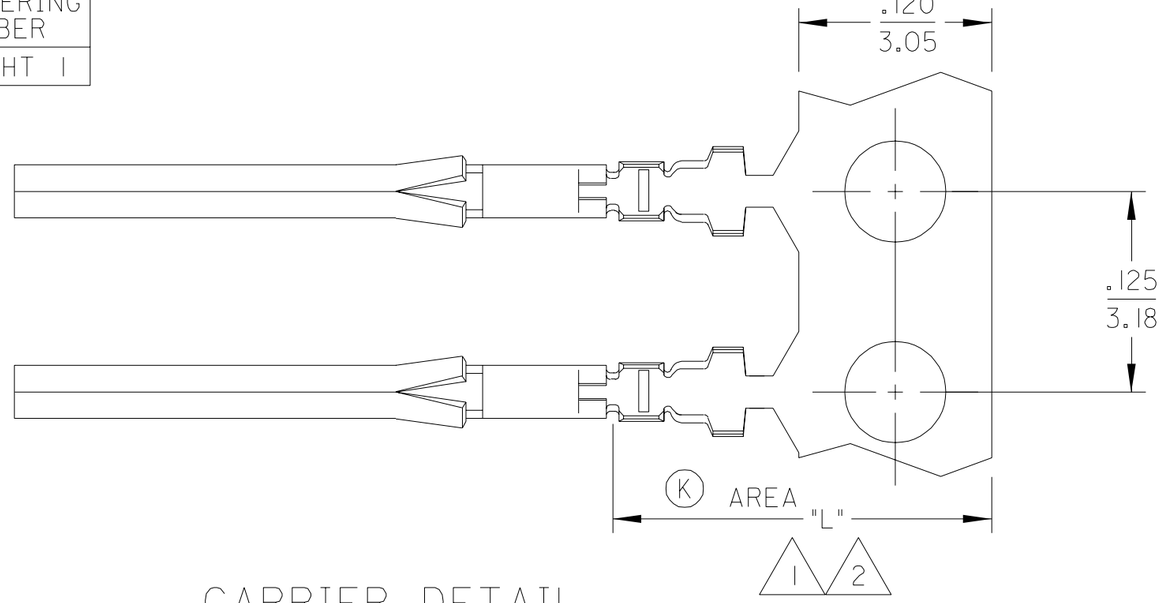
molex MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-83000-002
SHEET NO.: 2 OF 2

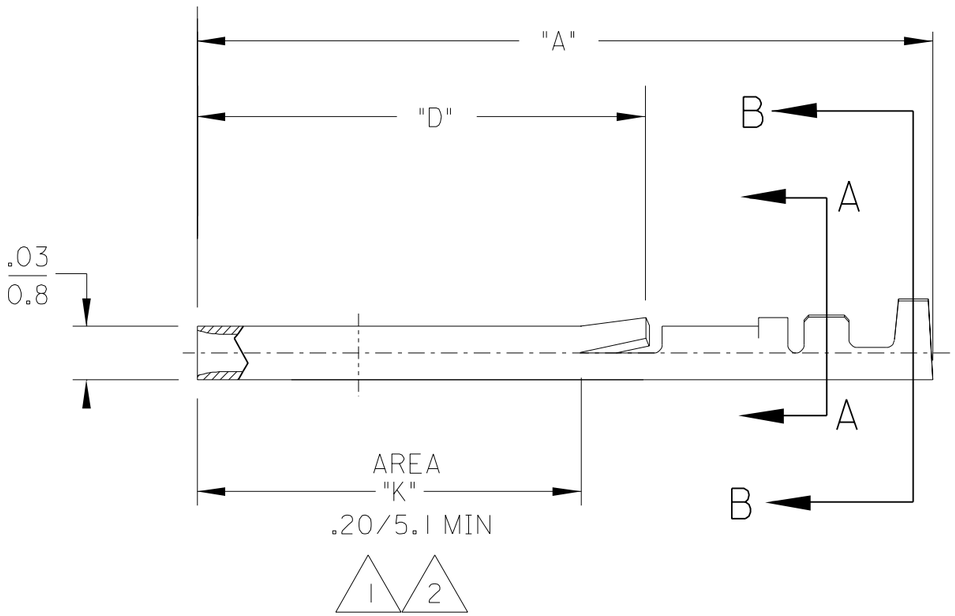
SIZE A3

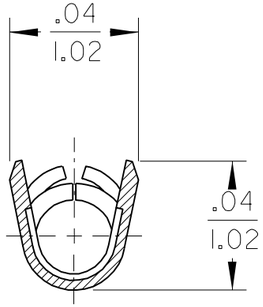
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| MATERIAL NUMBER | ENGINEERING NUMBER |
|---|---|
| SEE SHT 1 | SEE SHT 1 |

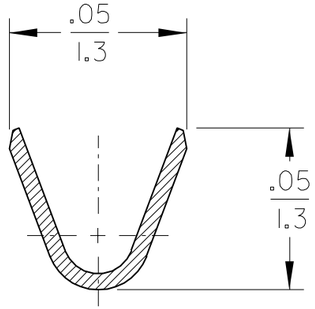



## CARRIER DETAIL




## SECTION A-A
SCALE: NONE




## SECTION B-B
SCALE: NONE

# SALES DRAWING

| REV | DESCRIPTION | EC NO. | DRWN | CH'K | APPR |
|---|---|---|---|---|---|
| K | ETC2003-0182 | ETC2003-0190 | BRE 03/01/30 | HEB/JAL 03/01/30 | RWD 03/01/30 |

QUALITY SYMBOLS
MAJOR ▼=0
CRITICAL C/=0

GENERAL TOLERANCES: (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ±0. | ±. |
| 3 PLACES | ±0. | ±.005 |
| 2 PLACES | ±0.13 | ±.010 |
| 1 PLACE | ±0.3 | ±. |
| ANGULAR: ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

SCALE NO:NE | DESIGN UNITS ☐mm ☒INCH | THIRD ANGLE PROJECTION | DIMENSIONS: ☐mm/INCH ☒INCH/mm ☐mm ONLY | SHT | REV | REVISE ON CAD ONLY

DRAWN BY & DATE: BRE 02/01/22
CHECKED BY & DATE: HEB 02/01/22
APPROVED BY & DATE: RWD 02/01/22

TITLE: CONTACT, SOCKET

molex MOLEX INCORPORATED

| CAD FILENAME | MATERIAL NO. | DRAWING NO. | SHEET NO. |
|---|---|---|---|
| SD83000002.DGN | SEE CHART | SD-83000-002 | 2 OF 2 |

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SIZE B