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Part Number:

0743015103

Status:

Active

Overview:

[hdm](#)

Description:

2.00mm (.079") Pitch HDM® Board-to-Board Backplane Header, Vertical, SMC, Press-Fit, Extended PC Tail, Polar/Guide Option, 144 Circuits

Documents:

[Drawing \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

| General                        |                                  |
|--------------------------------|----------------------------------|
| Product Family                 | Backplane Connectors             |
| Series                         | <a href="#">74301</a>            |
| Application                    | Backplane                        |
| Component Type                 | PCB Header                       |
| Overview                       | <a href="#">hdm</a>              |
| Product Name                   | HDM®                             |
| Style                          | N/A                              |
| Physical                       |                                  |
| Circuits (Loaded)              | 144                              |
| Circuits (maximum)             | 144                              |
| Color - Resin                  | Black, Natural                   |
| Durability (mating cycles max) | 250                              |
| First Mate / Last Break        | No                               |
| Guide to Mating Part           | No                               |
| Keying to Mating Part          | None                             |
| Material - Metal               | Phosphor Bronze, Stainless Steel |
| Material - Plating Mating      | Gold                             |
| Material - Plating Termination | Tin-Lead                         |
| Material - Resin               | High Temperature Thermoplastic   |
| Number of Columns              | 24                               |
| Number of Pairs                | Open Pin Field                   |
| Number of Rows                 | 6                                |
| Orientation                    | Vertical                         |
| PC Tail Length (in)            | 0.276 In                         |
| PC Tail Length (mm)            | 7.00 mm                          |
| PCB Locator                    | No                               |
| PCB Retention                  | Yes                              |
| PCB Thickness Recommended (in) | 0.098 In                         |
| PCB Thickness Recommended (mm) | 2.50 mm                          |
| Packaging Type                 | Tube                             |
| Pitch - Mating Interface (in)  | 0.079 In                         |
| Pitch - Mating Interface (mm)  | 2.00 mm                          |
| Pitch - Term. Interface (in)   | 0.079 In                         |
| Pitch - Term. Interface (mm)   | 2.00 mm                          |
| Plating min: Mating (µin)      | 30                               |
| Plating min: Mating (µm)       | 0.75                             |
| Plating min: Termination (µin) | 15                               |
| Plating min: Termination (µm)  | 0.375                            |
| Polarized to PCB               | No                               |
| Stackable                      | No                               |
| Surface Mount Compatible (SMC) | Yes                              |
| Temperature Range - Operating  | -55°C to +105°C                  |
| Termination Interface: Style   | Through Hole - Compliant Pin     |

Electrical



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

[74301Series](#)

|                               |          |
|-------------------------------|----------|
| Current - Maximum per Contact | 1A       |
| Data Rate                     | 1.0 Gbps |
| Real Signals (per 25mm)       | 75       |
| Shielded                      | No       |
| Voltage - Maximum             | 250V AC  |

**Material Info**

**Reference - Drawing Numbers**

|                         |               |
|-------------------------|---------------|
| Packaging Specification | PK-70873-0868 |
| Sales Drawing           | SD-74301-001  |

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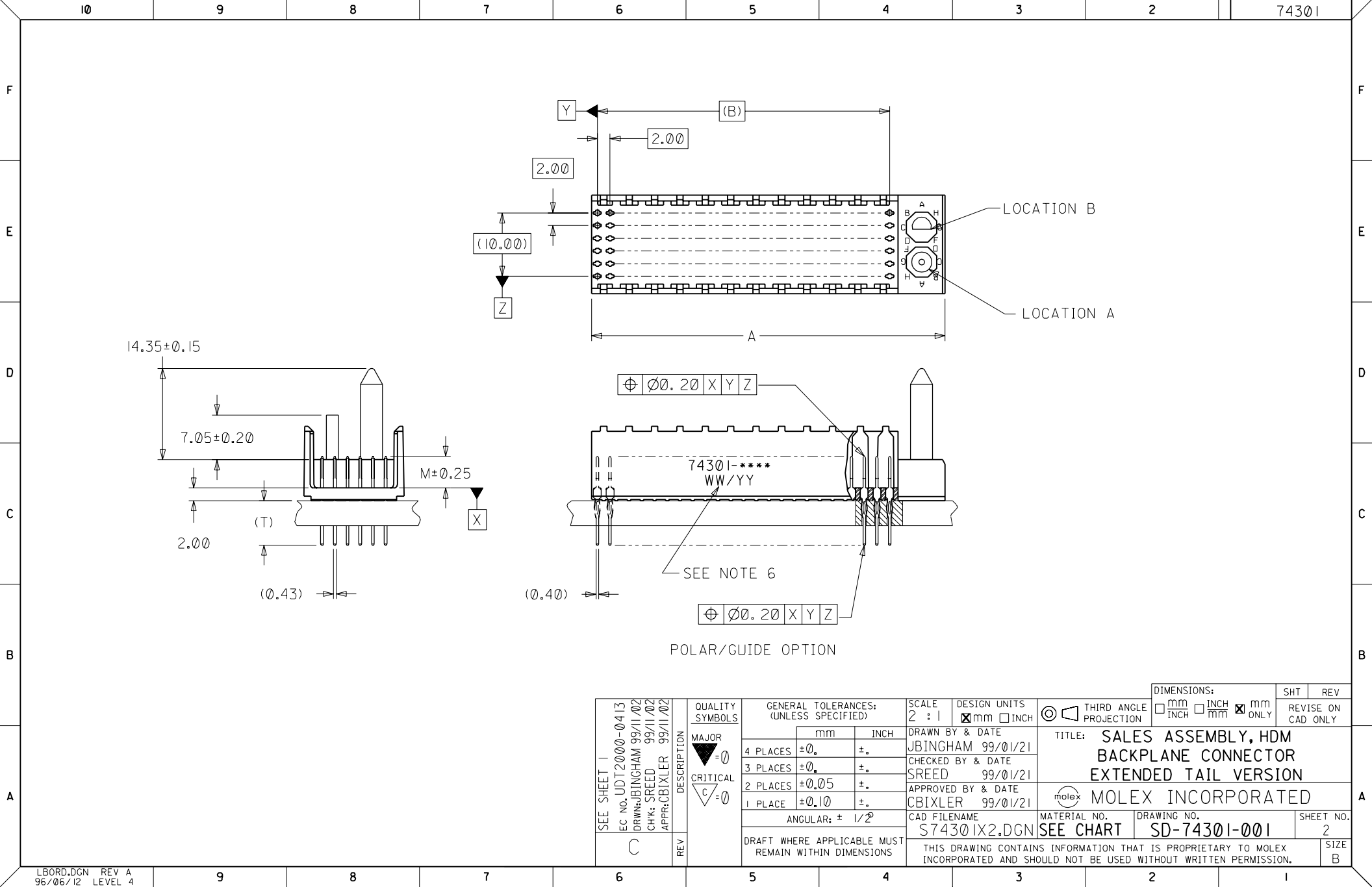
- NOTES:
1. MATERIALS: HOUSING-LIQUID CRYSTAL POLYMER (LCP),  
GLASS-FILLED, UL94V-0, COLOR: BLACK,  
CONTACT-PHOSPHOR BRONZE.
  2. FINISH: SELECTIVE GOLD (Au) IN CONTACT AREA,  
0.00076mm MINIMUM THICKNESS, SELECTIVE TIN/LEAD (Sn/Pb) ON TAILS,  
NICKEL (Ni) OVERALL.
  3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION  
PS-73670-9999.
  4. PACKAGED PER PK-70873-0868.
  5. PARTS MARKED WITH PART NUMBER AND DATE CODE,  
ON EITHER SIDE, APPROXIMATELY WHERE SHOWN.



OPEN END OPTION

END WALL OPTION

|                                                                                                              |                                  |                             |                                                         |       |                |                                                                                      |                                                                                       |                                                                                                                                   |                                     |                                     |                                                |                       |                           |  |                             |  |                     |  |
|--------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------|---------------------------------------------------------|-------|----------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|------------------------------------------------|-----------------------|---------------------------|--|-----------------------------|--|---------------------|--|
| REVISED<br>EC NO. UCP2003-2260<br>DRWN: THOMAS 03/04/25<br>CHK: BINGHAM 03/04/25<br>APPR: REED 03/04/25<br>D | DESCRIPTION<br>MAJOR<br>CRITICAL | QUALITY SYMBOLS<br>=0<br>=0 | GENERAL TOLERANCES:<br>(UNLESS SPECIFIED)               |       | SCALE<br>2 : 1 | DESIGN UNITS<br><input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH |  | THIRD ANGLE<br>PROJECTION                                                                                                         | <input type="checkbox"/> mm<br>INCH | <input type="checkbox"/> INCH<br>mm | <input checked="" type="checkbox"/> mm<br>ONLY | REVISE ON<br>CAD ONLY |                           |  |                             |  |                     |  |
|                                                                                                              |                                  |                             |                                                         | mm    | INCH           | DRAWN BY & DATE<br>JBINGHAM 99/01/21                                                 |                                                                                       | TITLE: SALES ASSEMBLY, HDM<br>BACKPLANE CONNECTOR<br>EXTENDED TAIL VERSION                                                        |                                     |                                     |                                                |                       |                           |  |                             |  |                     |  |
|                                                                                                              |                                  |                             | 4 PLACES                                                | ±0.   | ±.             | CHECKED BY & DATE<br>SREED 99/01/21                                                  |                                                                                       |                                                                                                                                   |                                     |                                     |                                                |                       |                           |  |                             |  |                     |  |
|                                                                                                              |                                  |                             | 3 PLACES                                                | ±0.   | ±.             | APPROVED BY & DATE<br>CBIXLER 99/01/21                                               |                                                                                       | MOLEX INCORPORATED                                                                                                                |                                     |                                     |                                                |                       |                           |  |                             |  |                     |  |
|                                                                                                              |                                  |                             | 2 PLACES                                                | ±0.05 | ±.             | CAD FILENAME<br>S74301X1.DGN                                                         |                                                                                       |                                                                                                                                   |                                     |                                     |                                                |                       | MATERIAL NO.<br>SEE CHART |  | DRAWING NO.<br>SD-74301-001 |  | SHEET NO.<br>1 OF 3 |  |
|                                                                                                              |                                  |                             | 1 PLACE                                                 | ±0.10 | ±.             | ANGULAR: ± 1/2°                                                                      |                                                                                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |                                     |                                     |                                                |                       |                           |  |                             |  |                     |  |
|                                                                                                              |                                  |                             | DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS |       |                |                                                                                      | SIZE<br>B                                                                             |                                                                                                                                   |                                     |                                     |                                                |                       |                           |  |                             |  |                     |  |
|                                                                                                              |                                  |                             |                                                         |       |                |                                                                                      |                                                                                       |                                                                                                                                   |                                     |                                     |                                                |                       |                           |  |                             |  |                     |  |
|                                                                                                              |                                  |                             | REV                                                     |       |                |                                                                                      |                                                                                       |                                                                                                                                   |                                     |                                     |                                                |                       |                           |  |                             |  |                     |  |



14.35±0.15

7.05±0.20

2.00

(T)

(0.43)

M±0.25

X

(10.00)

Z

2.00

Y

2.00

(B)

A

LOCATION B

LOCATION A

⊕ ∅0.20 X Y Z

74301-XXXX  
WW/YY

SEE NOTE 6

(0.40)

⊕ ∅0.20 X Y Z

POLAR/GUIDE OPTION

SEE SHEET 1  
EC NO. UDT2000-0413  
DRWN:JBINGHAM 99/11/02  
CHK: SREED 99/11/02  
APPR:CBIXLER 99/11/02

MAJOR  
=0  
CRITICAL  
C=0

REV

QUALITY  
SYMBOLS

GENERAL TOLERANCES:  
(UNLESS SPECIFIED)

|          | mm    | INCH |
|----------|-------|------|
| 4 PLACES | ±0.   | ±.   |
| 3 PLACES | ±0.   | ±.   |
| 2 PLACES | ±0.05 | ±.   |
| 1 PLACE  | ±0.10 | ±.   |

ANGULAR: ± 1/2°  
DRAFT WHERE APPLICABLE MUST  
REMAIN WITHIN DIMENSIONS

SCALE  
2 : 1

DESIGN UNITS  
☒ mm ☐ INCH

DRAWN BY & DATE  
JBINGHAM 99/01/21  
CHECKED BY & DATE  
SREED 99/01/21  
APPROVED BY & DATE  
CBIXLER 99/01/21

CAD FILENAME  
S74301X2.DGN

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX  
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DIMENSIONS:  
☐ mm ☐ INCH ☒ mm ONLY

SHT REV  
REVISE ON  
CAD ONLY

THIRD ANGLE  
PROJECTION

TITLE: SALES ASSEMBLY, HDM  
BACKPLANE CONNECTOR  
EXTENDED TAIL VERSION

MOLEX MOLEX INCORPORATED

MATERIAL NO. SEE CHART  
DRAWING NO. SD-74301-001

SHEET NO. 2  
SIZE B

MATERIAL NUMBER ASSIGNMENT

0 = 72-CIRCUIT OPEN END  
1 = 144-CIRCUIT OPEN END  
2 = 72-CIRCUIT END WALL  
3 = 144-CIRCUIT END WALL  
4 = 72-CIRCUIT POALR/GUIDE  
5 = 144-CIRCUIT POLAR/GUIDE

0 = 5.0mm MATING, 7.0mm TAIL  
1 = 5.5mm MATING, 7.0mm TAIL  
2 = 6.0mm MATING, 7.0mm TAIL

74301- \* \* \* \*

| NUMBER | GUIDE POST LOCATION | POLAR KEY POSITION |
|--------|---------------------|--------------------|
| 00     | N/A                 | N/A                |
| 01     | B                   | A                  |
| 02     | A                   |                    |
| 03     | B                   | B                  |
| 04     | A                   |                    |
| 05     | B                   | C                  |
| 06     | A                   |                    |
| 07     | B                   | D                  |
| 08     | A                   |                    |
| 09     | B                   | E                  |
| 10     | A                   |                    |
| 11     | B                   | F                  |
| 12     | A                   |                    |
| 13     | B                   | G                  |
| 14     | A                   |                    |
| 15     | B                   | H                  |
| 16     | A                   |                    |
| 17     | B                   | N/A                |
| 18     | A                   |                    |

| PART NUMBER | DIM A | DIM B | DIM M | DIM T |
|-------------|-------|-------|-------|-------|
| 74301-0000  | 23.8  | 22.00 | 5.00  | 7.00  |
| 74301-0100  | 23.8  | 22.00 | 5.50  | 7.00  |
| 74301-0200  | 23.8  | 22.00 | 6.00  | 7.00  |
| 74301-1000  | 47.8  | 46.00 | 5.00  | 7.00  |
| 74301-1100  | 47.8  | 46.00 | 5.50  | 7.00  |
| 74301-1200  | 47.8  | 46.00 | 6.00  | 7.00  |
| 74301-2000  | 27.6  | 22.00 | 5.00  | 7.00  |
| 74301-2100  | 27.6  | 22.00 | 5.50  | 7.00  |
| 74301-2200  | 27.6  | 22.00 | 6.00  | 7.00  |
| 74301-3000  | 51.6  | 46.00 | 5.00  | 7.00  |
| 74301-3100  | 51.6  | 46.00 | 5.50  | 7.00  |
| 74301-3200  | 51.6  | 46.00 | 6.00  | 7.00  |
| 74301-40**  | 31.6  | 22.00 | 5.00  | 7.00  |
| 74301-41**  | 31.6  | 22.00 | 5.50  | 7.00  |
| 74301-42**  | 31.6  | 22.00 | 6.00  | 7.00  |
| 74301-50**  | 55.6  | 46.00 | 5.00  | 7.00  |
| 74301-51**  | 55.6  | 46.00 | 5.50  | 7.00  |
| 74301-52**  | 55.6  | 46.00 | 6.00  | 7.00  |



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 2.50 MIN.

|                                                                                                              |                                  |                                                         |  |                                                                                                                                   |                                                                                      |                              |                                                                                                                      |                           |                             |                |
|--------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------|----------------|
| SEE SHEET 1<br>EC NO. UDT2000-0413<br>DRWN:JBINGHAM 99/11/02<br>CHK: SREED 99/11/02<br>APPR:CBIXLER 99/11/02 | DESCRIPTION<br>MAJOR<br>CRITICAL | GENERAL TOLERANCES:<br>(UNLESS SPECIFIED)               |  | SCALE<br>2 : 1                                                                                                                    | DESIGN UNITS<br><input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH | THIRD ANGLE<br>PROJECTION    | DIMENSIONS:<br><input type="checkbox"/> mm <input type="checkbox"/> INCH <input checked="" type="checkbox"/> mm ONLY |                           | SHT                         | REV            |
|                                                                                                              |                                  | 4 PLACES ±0. ±.                                         |  | DRAWN BY & DATE<br>JBINGHAM 99/01/21                                                                                              |                                                                                      |                              | TITLE: SALES ASSEMBLY, HDM<br>BACKPLANE CONNECTOR<br>EXTENDED TAIL VERSION<br>MOLEX INCORPORATED                     |                           |                             |                |
|                                                                                                              |                                  | 3 PLACES ±0. ±.                                         |  | CHECKED BY & DATE<br>SREED 99/01/21                                                                                               |                                                                                      |                              |                                                                                                                      |                           |                             |                |
|                                                                                                              |                                  | 2 PLACES ±0.05 ±.                                       |  | APPROVED BY & DATE<br>CBIXLER 99/01/21                                                                                            |                                                                                      |                              |                                                                                                                      |                           |                             |                |
| C                                                                                                            | REV                              | 1 PLACE ±0.10 ±.                                        |  | ANGULAR: ± 1/2°                                                                                                                   |                                                                                      | CAD FILENAME<br>S74301X3.DGN |                                                                                                                      | MATERIAL NO.<br>SEE CHART | DRAWING NO.<br>SD-74301-001 | SHEET NO.<br>3 |
|                                                                                                              |                                  | DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |                                                                                      |                              |                                                                                                                      |                           |                             |                |
|                                                                                                              |                                  |                                                         |  | SIZE<br>B                                                                                                                         |                                                                                      |                              |                                                                                                                      |                           |                             |                |



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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