

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

**Part Number:** [0754921023](#)  
**Status:** **Active**  
**Overview:** [gbx\\_backplane\\_connector\\_system](#)  
**Description:** 1.85mm by 1.85mm (.073 by .073") Pitch 2-Pair GbX® Backplane Connector System, Power Module, 4 Circuits, 1.27µm (50µ") Gold (Au), Lead Free

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-75221-999 \(PDF\)](#)

**Agency Certification**

UL E29179

**General**

Product Family Backplane Connectors  
 Series [75492](#)  
 Application Backplane  
 Application Tooling Documents [Tooling Manual](http://www.molex.com/pdm_docs/ats/TM-622022099.pdf)  
 Comments Blade Length A 4.50mm, B 6.00mm  
 Component Type Power Header  
 Overview [gbx\\_backplane\\_connector\\_system](#)  
 Product Name GbX®  
 Style N/A

**Physical**

Circuits (Loaded) 4  
 Circuits (maximum) 4  
 Circuits Detail Rows A & B  
 Color - Resin Gray (Dark)  
 Durability (mating cycles max) 200  
 First Mate / Last Break Yes  
 Flammability 94V-0  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Material - Metal High Performance Alloy (HPA)  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Columns N/A  
 Number of Pairs 2  
 Number of Rows 2  
 Orientation Vertical  
 PC Tail Length (in) 0.090 In  
 PC Tail Length (mm) 2.28 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.063 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.730 In  
 Pitch - Mating Interface (mm) 1.85 mm  
 Pitch - Term. Interface (in) 0.102 In  
 Pitch - Term. Interface (mm) 2.60 mm  
 Plating min: Mating (µin) 50  
 Plating min: Mating (µm) 1.25

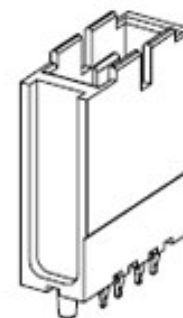


image - Reference only

Series

**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC  
Not Reviewed**  
**Halogen-Free  
Status**

**China RoHS**



**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**

[75492Series](#)

**Mates With**

[75292 GbX® Daughtercard](#)

|                                      |                              |
|--------------------------------------|------------------------------|
| Plating min: Termination ( $\mu$ in) | 30                           |
| Plating min: Termination ( $\mu$ m)  | 0.75                         |
| Polarized to PCB                     | Yes                          |
| Stackable                            | No                           |
| Surface Mount Compatible (SMC)       | Yes                          |
| Temperature Range - Operating        | 105°C                        |
| Termination Interface: Style         | Through Hole - Compliant Pin |

### **Electrical**

|                               |                  |
|-------------------------------|------------------|
| Current - Maximum per Contact | 6A               |
| Data Rate                     | 8.0 Gbps         |
| Shielded                      | No               |
| Voltage - Maximum             | 120V AC (RMS)/DC |

### **Material Info**

#### **Reference - Drawing Numbers**

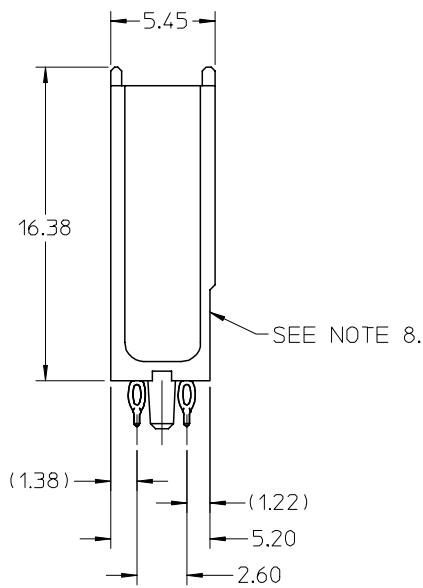
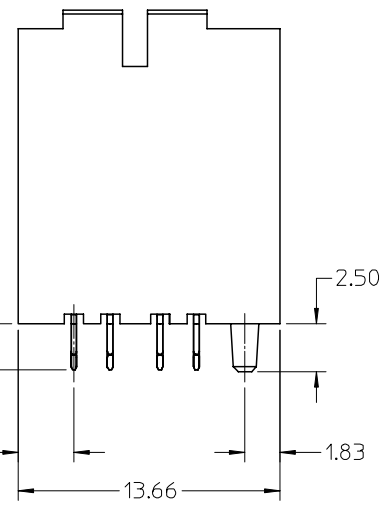
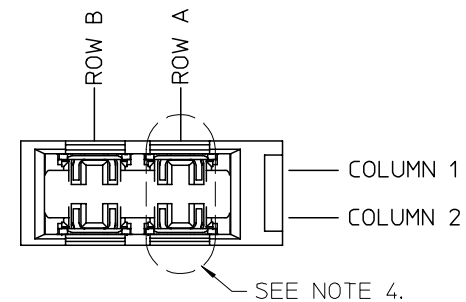
|                         |              |
|-------------------------|--------------|
| Packaging Specification | PK-70873-578 |
| Product Specification   | PS-75221-999 |
| Sales Drawing           | SD-75492-001 |

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10 9 8 7 6 5 4 3 2 1



**1-UP ASSEMBLY PART NUMBER**

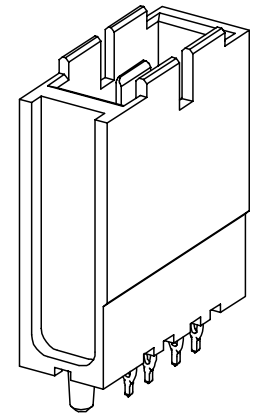
7 5 4 9 2 - 1 0 A B

- TIN/LEAD PLATED PRODUCT -
- FOR EACH ROW LOCATION A, B:
- 4 = 4.5 mm
- 6 = 6.0 mm
- 7 = 7.5 mm
- LEAD-FREE PLATED PRODUCT -
- FOR EACH ROW LOCATION A, B:
- 2 = 4.5 mm
- 3 = 6.0 mm
- 5 = 7.5 mm

SEE SHEET 4 FOR HOLE PATTERN LAYOUT

**NOTES:**

1. MATERIALS: HOUSING - LIQUID CRYSTAL POLYMER (LCP), UL 94V-0, GRAY; CONTACT - COPPER ALLOY
2. FINISH: SELECT GOLD IN CONTACT AREA, 50 μ" THICK; TIN/LEAD OR MATTE TIN IN COMPLIANT AREA.
3. PACKAGING PER PK-70873-578.
4. CONTACTS IN EACH ROW HAVE THE SAME WIPE LENGTH.
5. BACKPLANE ASSEMBLY MATES WITH DAUGHTERCARD POWER MODULE 75292-2\*\*\*.
6. PART SHOWN IS 75492-1067.
7. SEE OTHER SHEETS FOR ADDITIONAL NOTES.
8. WHEN INSERTING OPEN SIGNAL MODULES NEXT TO COLUMN 1 SIDE OF POWER MODULES, SIGNAL MODULES MUST BE INSERTED BEFORE THE POWERS TO AVOID INTERFERENCE BETWEEN THE TWO CONNECTOR HOUSINGS.
9. THESE PARTS CONFORM TO MOLEX PRODUCT SPECIFICATION PS-75221-999.
10. THESE PARTS CONFORM TO MOLEX COSMETIC SPECIFICATION PS-45499-002 CLASS B.



ADDED NOTES 9 & 10  
 EC NO: UCP2008-0426  
 DRW: JSTEWART 2007/08/29  
 CHKD: JBRINGHAM 2007/08/30  
 APPR: JBRINGHAM 2007/08/31

| REV | DESCRIPTION |
|-----|-------------|
|     |             |

| QUALITY SYMBOLS |    |
|-----------------|----|
|                 | =0 |
|                 | =0 |

| GENERAL TOLERANCES (UNLESS SPECIFIED) |           |
|---------------------------------------|-----------|
| PLACES                                | TOLERANCE |
| 4 PLACES                              | ± 0.15    |
| 3 PLACES                              | ± 0.20    |
| 2 PLACES                              | ± 0.25    |
| 1 PLACE                               | ± 0.30    |
| ANGULAR ± 5 °                         |           |

| DIMENSION STYLE |            |
|-----------------|------------|
| MM ONLY         |            |
| DRAWN BY        | DATE       |
| ELO             | 2005/07/01 |
| CHECKED BY      | DATE       |
| ELO             | 2005/07/01 |
| APPROVED BY     | DATE       |
| BIXLER          | 2005/07/06 |

|   |              |                        |
|---|--------------|------------------------|
| SCALE                                     | DESIGN UNITS | THIRD ANGLE PROJECTION |
| 4:1                                       | METRIC       |                        |
| TITLE                                     |              |                        |
| GBX 2 PAIR BACKPLANE POWER SALES ASSEMBLY |              |                        |
| MATERIAL NO. SEE CHART                    |              |                        |
| DOCUMENT NO. SD-75492-001                 |              | SHEET NO. 1 OF 4       |

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

2-UP ASSEMBLY PART NUMBER

7 5 4 9 2 - 2 0 A B

- TIN/LEAD PLATED PRODUCT -  
FOR EACH ROW LOCATION A, B:

4 = 4.5 mm

6 = 6.0 mm

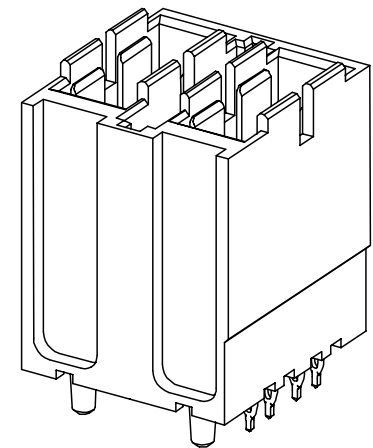
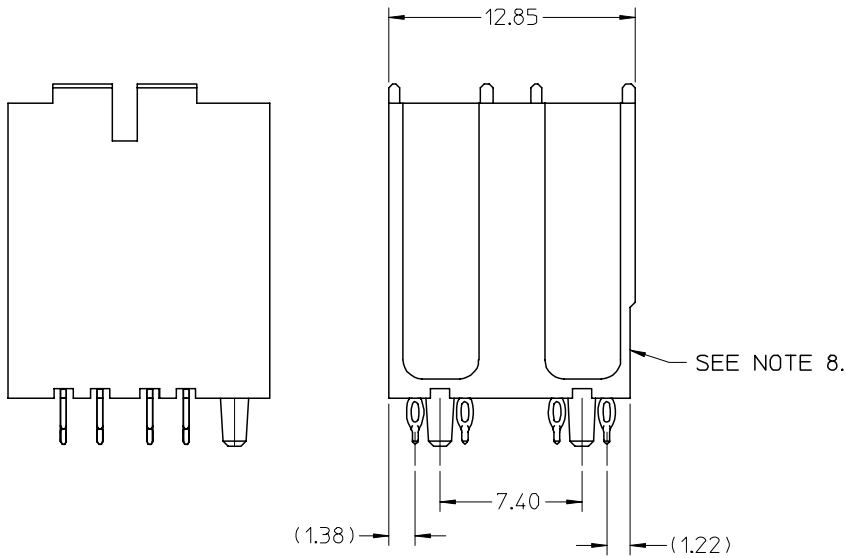
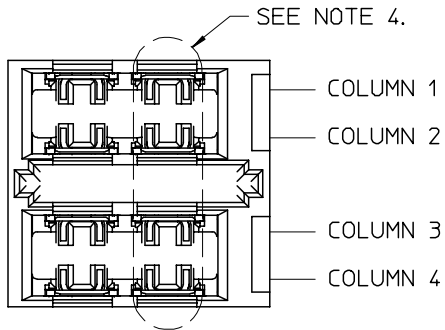
7 = 7.5 mm

- LEAD-FREE PLATED PRODUCT -  
FOR EACH ROW LOCATION A, B:

2 = 4.5 mm

3 = 6.0 mm

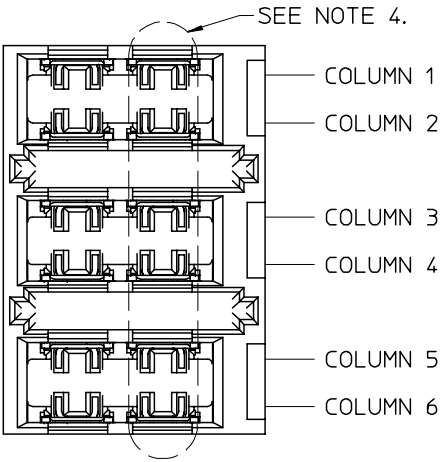
5 = 7.5 mm



SEE SHEET 1 FOR ADDITIONAL INFORMATION  
CHECK WITH PRODUCT MANAGER FOR AVAILABILITY

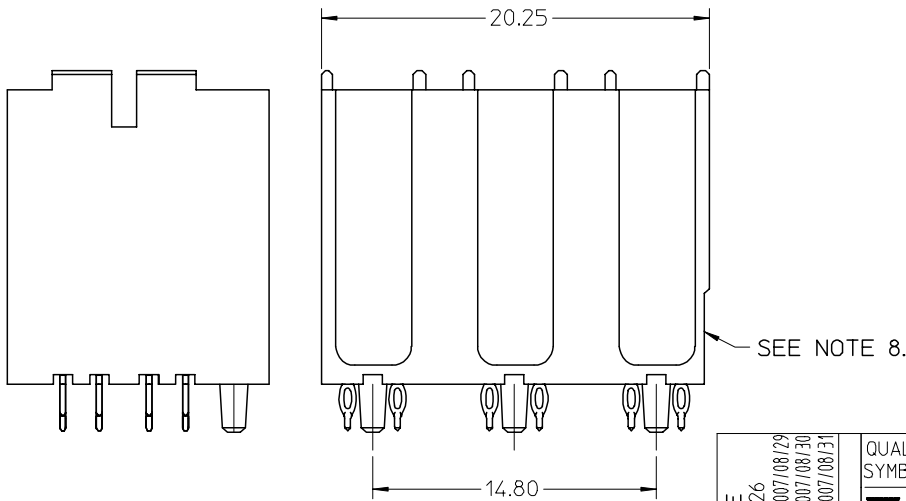
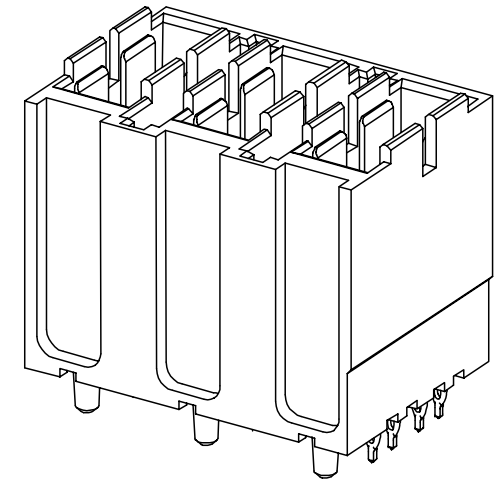
|  |                               |  |  |                 |                    |              |  |  |  |
|--|-------------------------------|--|--|-----------------|--------------------|--------------|--|--|--|
| SEE SHEET ONE<br>EC NO: UCP2008-0426<br>DRWN: STEWART 2007/08/29<br>CHKD: BINGHAM 2007/08/30<br>APPR: BINGHAM 2007/08/31 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |  | DIMENSION STYLE | SCALE              | DESIGN UNITS | THIRD ANGLE PROJECTION                                   |  |  |
|  |                               |  |  | MM ONLY         | 4:1                | METRIC       |  |  |  |
|  |                               | 4 PLACES   | ± ---  | ± ---           | DRAWN BY           | DATE         | TITLE<br>GBX 2 PAIR<br>BACKPLANE POWER<br>SALES ASSEMBLY |  |  |
|  |                               | 3 PLACES   | ± ---  | ± ---           | ELO                | 2005/07/01   |  |  |  |
| 2 PLACES   | ± ---                         | ± ---  | CHECKED BY   | DATE            | MOLEX INCORPORATED |              |  |  |  |
| 1 PLACE  | ± ---                         | ± ---  | ELO  | 2005/07/01      |                    |              |  |  |  |
|  |                               | ANGULAR ± 5 °  | APPROVED BY  | DATE            | MATERIAL NO.       | DOCUMENT NO. | SHEET NO.  |  |  |
|  |                               |  | BIXLER   | 2005/07/06      | SEE CHART          | SD-75492-001 | 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 |                 |                    |              |  |  |  |

9 8 7 6 5 4 3 2 1



3-UP ASSEMBLY PART NUMBER

- 7 5 4 9 2 - 3 0 A B
- TIN/LEAD PLATED PRODUCT -
  - FOR EACH ROW LOCATION A, B:
  - 4 = 4.5 mm
  - 6 = 6.0 mm
  - 7 = 7.5 mm
  - LEAD-FREE PLATED PRODUCT -
  - FOR EACH ROW LOCATION A, B:
  - 2 = 4.5 mm
  - 3 = 6.0 mm
  - 5 = 7.5 mm



SEE SHEET 1 FOR ADDITIONAL INFORMATION  
CHECK WITH PRODUCT MANAGER FOR AVAILABILITY

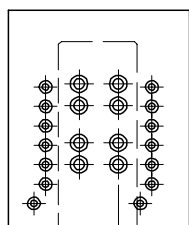
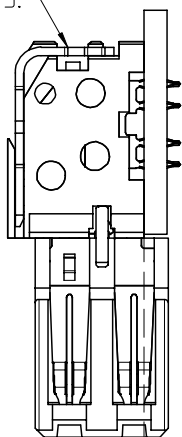
|  |                               |  |  |                            |      |                              |                        |  |  |  |  |
|--|-------------------------------|--|--|----------------------------|------|------------------------------|------------------------|--|--|--|--|
| SEE SHEET ONE<br>EC NO: UCP2008-0426<br>DRWN: C STEWART 2007/08/29<br>CHKD: J BINGHAM 2007/08/30<br>APPR: J BINGHAM 2007/08/31 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |  | DIMENSION STYLE<br>MM ONLY |      | SCALE<br>4:1                 | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION                                   |  |  |  |
|  |                               |  |  | mm                         | INCH | DRAWN BY<br>ELO              | DATE<br>2005/07/01     | TITLE<br>GBX 2 PAIR<br>BACKPLANE POWER<br>SALES ASSEMBLY |  |  |  |
|  |                               |  |  |                            |      | CHECKED BY                   | DATE<br>2005/07/01     |  |  |  |  |
|  |                               |  |  | ANGULAR ± 5 °              |      | APPROVED BY<br>BIXLER        | DATE<br>2005/07/06     | MATERIAL NO. SEE CHART                                   |  |  |  |
|  |                               | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |  | MATERIAL NO. SEE CHART     |      | DOCUMENT NO.<br>SD-75492-001 |                        | SHEET NO.<br>3 OF 4                                      |  |  |  |

10 9 8 7 6 5 4 3 2 1

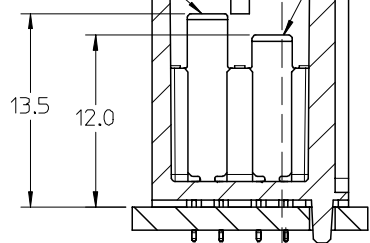
### HOLE PATTERN FOR 1-UP ASSEMBLY

- 1.) ADD 7.40 FROM CENTERLINES OF PEG FOR MULTIPLE UP ASSEMBLIES
- 2.) USE 5.55 FROM CENTERLINE TO CENTERLINE OF PEG FOR INDIVIDUAL POWER MODULES STACKED NEXT TO EACH OTHER.

SEE NOTE 5.



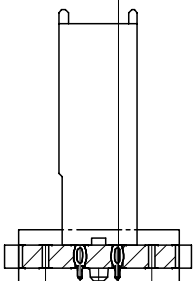
7.5 mm WIPE 6.0 mm WIPE



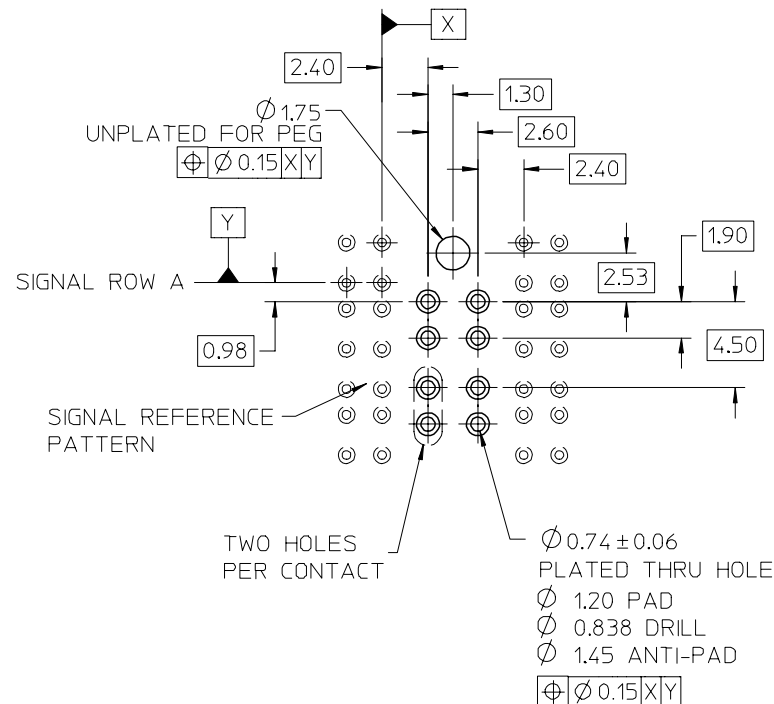
SEE NOTE 6.

0.27

DC BOARD EDGE TO CENTERLINE OF BP TAIL



0.06



| SEE SHEET ONE<br>EC NO: UCP2008-0426<br>DRW: C STEWART 2007/08/29<br>CHKD: J BINGHAM 2007/08/30<br>APPR: J BINGHAM 2007/08/31 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |       | DIMENSION STYLE<br>MM ONLY  |    | SCALE<br>4:1       | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |       |          |       |       |          |       |       |         |       |       |  |  |  |  |  |  |
|---|-------------------------------|---|-------|---|----|--------------------|------------------------|------------------------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|--|--|--|--|--|--|
|   |                               | <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table> |       |   | mm | INCH               | 4 PLACES               | ± ---                  | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± --- | ± --- | 1 PLACE | ± --- | ± --- | DRAWN BY: ELO DATE: 2005/07/01<br>CHECKED BY: DATE: 2005/07/01<br>APPROVED BY: BIXLER DATE: 2005/07/06 |  | TITLE<br>GBX 2 PAIR BACKPLANE POWER SALES ASSEMBLY |  |  |  |
|   |                               |   | mm    | INCH  |    |                    |                        |                        |       |          |       |       |          |       |       |         |       |       |  |  |  |  |  |  |
|   |                               | 4 PLACES  | ± --- | ± ---   |    |                    |                        |                        |       |          |       |       |          |       |       |         |       |       |  |  |  |  |  |  |
| 3 PLACES  | ± ---                         | ± ---   |       |   |    |                    |                        |                        |       |          |       |       |          |       |       |         |       |       |  |  |  |  |  |  |
| 2 PLACES  | ± ---                         | ± ---   |       |   |    |                    |                        |                        |       |          |       |       |          |       |       |         |       |       |  |  |  |  |  |  |
| 1 PLACE   | ± ---                         | ± ---   |       |   |    |                    |                        |                        |       |          |       |       |          |       |       |         |       |       |  |  |  |  |  |  |
| ANGULAR ± 5 °   |                               | MATERIAL NO.<br>SEE PREVIOUS  |       | DOCUMENT NO.<br>SD-75492-001  |    | MOLEX INCORPORATED |                        |                        |       |          |       |       |          |       |       |         |       |       |  |  |  |  |  |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |                               | SIZE<br>B   |       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |    |                    |                        |                        |       |          |       |       |          |       |       |         |       |       |  |  |  |  |  |  |

9 8 7 6 5 4 3 2 1