

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

**Part Number:** [0758360504](#)  
**Status:** **Active**  
**Overview:** [gbx\\_backplane\\_connector\\_system](#)  
**Description:** 1.85mm by 1.85mm (.073 by .073") Pitch 3-Pair GbX® Backplane Connector System, Open Header, 30 Circuits, Lead Free, Pin Length 4.55mm (.179")

**Documents:**

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

**Agency Certification**

UL      E29179

**General**

Product Family      Backplane Connectors  
Series      [75836](#)  
Application      Backplane  
Application Tooling Documents      <a href="http://www.molex.com/pdm\_docs/ats/TM-622022099.pdf">Tooling Manual</a>  
Comments      Open Header  
Component Type      PCB Header  
Overview      [gbx\\_backplane\\_connector\\_system](#)  
Product Name      GbX®  
Style      N/A

**Physical**

Circuits (Loaded)      30  
Circuits (maximum)      30  
Color - Resin      Black  
Durability (mating cycles max)      200  
First Mate / Last Break      No  
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      5  
Number of Pairs      3  
Number of Rows      6  
Orientation      Vertical  
PC Tail Length (in)      0.087 In  
PC Tail Length (mm)      2.20 mm  
PCB Locator      No  
PCB Retention      Yes  
PCB Thickness Recommended (in)      0.063 In  
PCB Thickness Recommended (mm)      1.60 mm  
Packaging Type      Tube  
Pitch - Mating Interface (in)      0.073 In  
Pitch - Mating Interface (mm)      1.85 mm  
Pitch - Term. Interface (in)      0.073 In  
Pitch - Term. Interface (mm)      1.85 mm  
Plating min: Mating (µin)      30  
Plating min: Mating (µm)      0.76  
Plating min: Termination (µin)      30

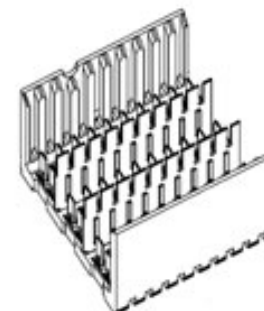


image - Reference only

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**

[75836Series](#)

**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 #                  |
|-----------------------------|----------------------------|
| GbX® 3 Pair by 5            | <a href="#">0622022500</a> |
| Differential Insertion Tool |                            |

|                                |                              |
|--------------------------------|------------------------------|
| Plating min: Termination (µm)  | 0.76                         |
| Polarized to PCB               | No                           |
| Stackable                      | No                           |
| Surface Mount Compatible (SMC) | Yes                          |
| Temperature Range - Operating  | 105°C                        |
| Termination Interface: Style   | Through Hole - Compliant Pin |

### **Electrical**

|                               |                     |
|-------------------------------|---------------------|
| Current - Maximum per Contact | 1A                  |
| Data Rate                     | 8.0 Gbps            |
| Real Signals (per 25mm)       | 82                  |
| Shield Type                   | Ground Plane Shield |
| Shielded                      | Yes                 |
| Voltage - Maximum             | 120V AC (RMS)/DC    |

### **Material Info**

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

|                         |              |
|-------------------------|--------------|
| Packaging Specification | PK-70873-576 |
| Product Specification   | PS-75221-999 |
| Sales Drawing           | SD-75836-010 |

GbX is a registered trademark of Amphenol Corporation.

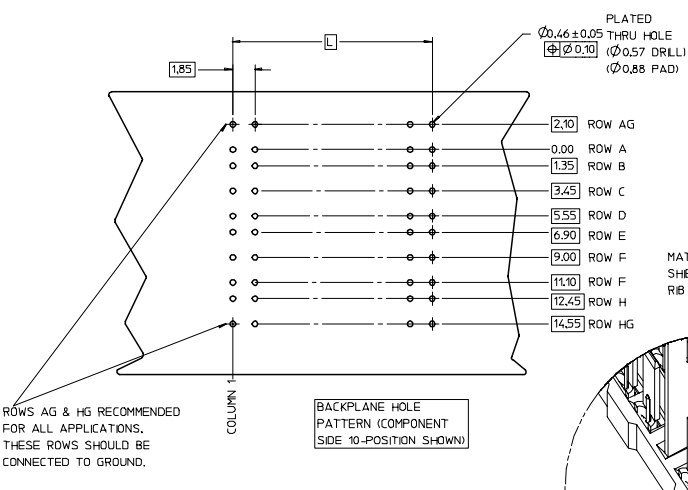
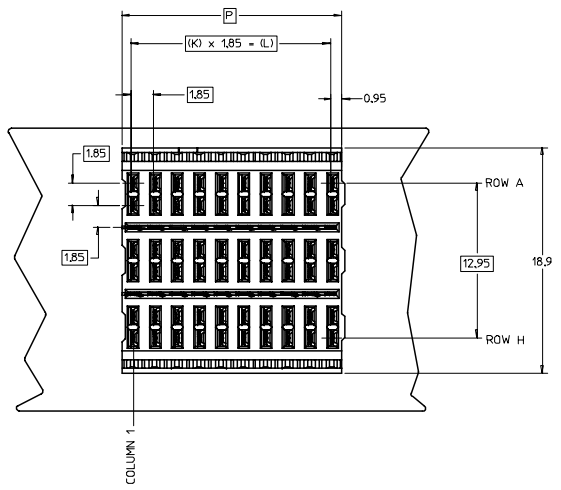
This document was generated on 05/14/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

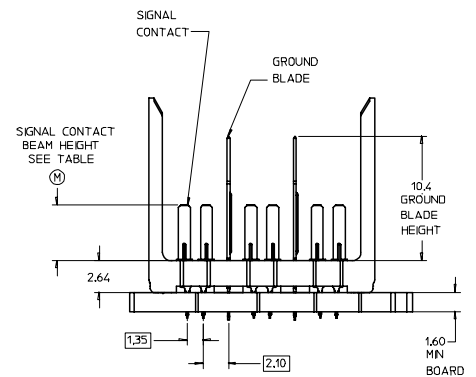
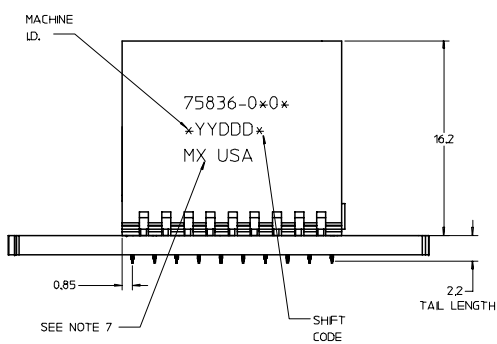
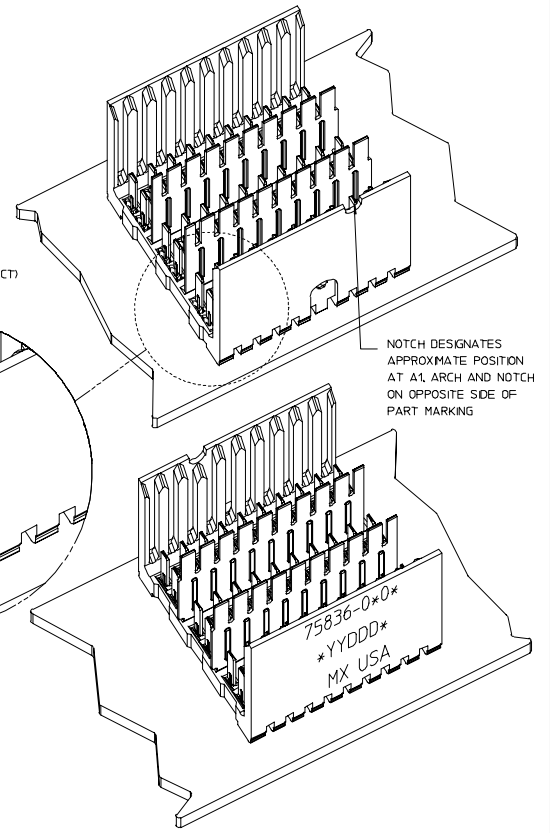
L  
K  
J  
I  
H  
G  
F  
E  
D  
C  
B  
A

L  
K  
J  
I  
H  
G  
F  
E  
D  
C  
B  
A



BACKPLANE HOLE PATTERN (COMPONENT SIDE 10-POSITION SHOWN)

PLATED  
0.46±0.05 THRU HOLE  
(Ø0.57 DRILL)  
(Ø0.88 PAD)



LEAD-FREE  
PLATING ON  
SIGNALS & GROUNDS.

- NOTES:
- MATERIAL: HOUSING - LIQUID CRYSTAL POLYMER (LCP) GLASS-FILLED, UL 94V-0, COLOR - GRAY. SIGNAL CONTACT AND GROUND BLADE - HIGH PERFORMANCE COPPER ALLOY.
  - FINISHES: SELECTIVE GOLD (Au) ON CONTACT AREA. SELECTIVE MATTE TIN (Sn) ON PCB TAILS. NICKEL (Ni) OVERALL.
  - THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-75221-999.
  - FOR MIXED CONTACT MATING LENGTHS CONSULT MOLEX FOR AVAILABILITY. CONTACT PAIRS MUST BE THE SAME LENGTH.
  - FOR SPECIFIC PART NUMBER AND MATING INFORMATION PLEASE REFER TO CHART.
  - PACKAGE PER PK-70873-576.
  - EITHER MARK PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE A LABEL ON THE TUBE.

75836-xx0\*

COLUMN  
01 - 10 COL  
02 - 25 COL  
05 - 5 COL

PN LENGTH  
DM "M"  
3=3.55 mm  
4=4.55 mm  
5=5.55 mm

KEYING  
ORIENTATION  
OPEN = 0 (NONE)

| PART NUMBER TABLE |    |       |       |                                 |
|-------------------|----|-------|-------|---------------------------------|
| ASSY PART NO.     | K  | L     | P     | TOTAL NO. OF DIFFERENTIAL PAIRS |
| 75836-010*        | 9  | 16.65 | 18.35 | 30                              |
| 75836-020*        | 24 | 44.40 | 46.10 | 75                              |
| 75836-050*        | 4  | 7.40  | 9.10  | 15                              |

|   |   |   |                               |  |   |                    |
|---|---|---|-------------------------------|--|---|--------------------|
| REVISED<br>EC NO: UCP 2006-2458<br>DRAWN: JBINGHAM 2006/04/20<br>CHKD: 2006/04/20<br>APPR: CBAXLER 2006/04/20 | QUALITY SYMBOLS<br>0<br>0   | GENERAL TOLERANCES (UNLESS SPECIFIED)   | SCALE 5:1                     | DESIGN UNITS METRIC  | THIRD ANGLE PROJECTION  | REVISE ON CAD ONLY |
|   |   | 4 PLACES ±--- ±---<br>3 PLACES ±--- ±---<br>2 PLACES ±--- ±---<br>1 PLACE ±--- ±--- | DIMENSION STYLE MM ONLY       | TITLE GBX 3-PAIR OPEN END BACKPLANE ASSEMBLY LEAD-FREE SALES DRAWING |   |                    |
| DESCRIPTION   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  | APPROVED BY JBINGHAM 2006/01/17   | CHECKED BY KMULVEY 2006/01/16 | DRAWN BY CTHOMAS 2006/01/13  | MATERIAL NO. SEE CHART DOCUMENT NO. SD-75836-010 SHEET NO. 1 OF 1 |                    |
|   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |                               |  |   |                    |

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1