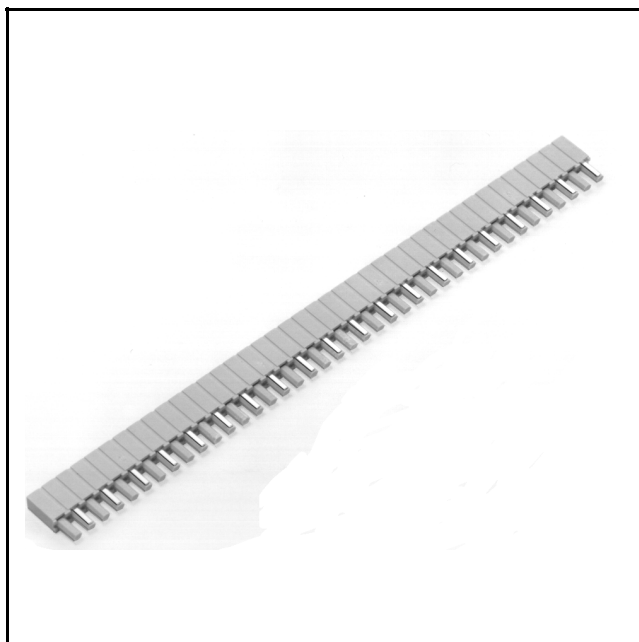


# 3M™ Thru-Board Socket

.100" and .100" × .100" Straight, Solder Tails

929 Series



- 3-40 contacts on one row, 4-80 on two row
- Single hole board preparation simplifies board layout
- No solder mask preparation speeds manufacturing assembly
- Top mounting allows single pass for wave soldering
- See Regulatory Information Index (RIA) for chemical compliance information

Date Modified: March 15, 2007

TS-0814-05  
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## Physical

**Insulation** Glass Filled Polyester (PBT)  
Material:  
Flammability: UL 94V-0  
Color: Gray  
**Contact**  
Material: Copper  
**Plating**  
Underplating: 100 μm [ 2.54 μm ] Nickel  
Wiping Area: See soldering information options for thickness  
Solder Tail: 100 μm [ 2.54 μm ] tin lead or 200 μm [ 5.08 μm ] matte tin  
Marking: None

## Electrical

**Current Rating:** 2 A  
**Insulation Resistance:**  $> 1 \times 10^9 \Omega$  at 500 V<sub>DC</sub>  
**Withstanding Voltage:** 1000 V<sub>RMS</sub> at Sea Level

## Environmental

**Temperature Rating:** -55°C to +105°C  
**Process Rating:** 260°C, (profile per J-STD-020C)  
**Moisture Sensitivity Level:** 1 (per J-STD-020C)

UL File No.: E68080

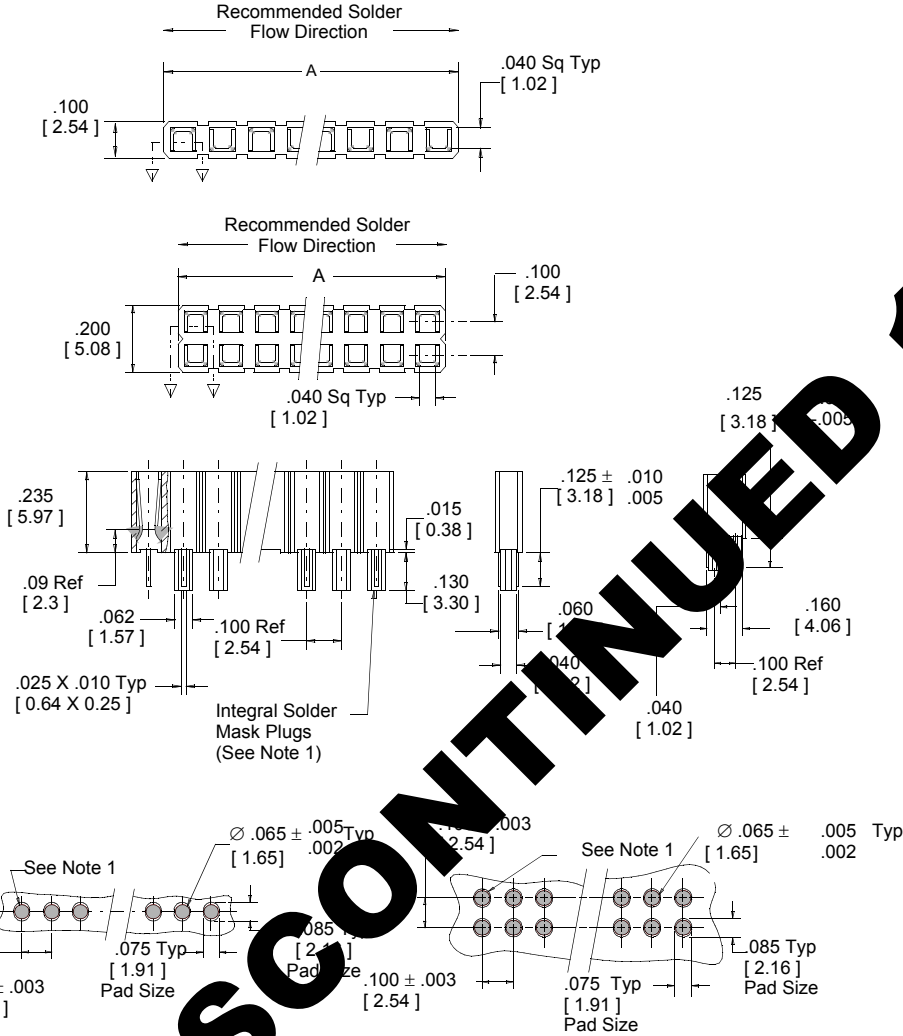
# 3M™ Thru-Board Socket

.100" and .100" x .100" Straight, Solder Tails

929 Series

| Inch<br>[mm]           |     |      |       |
|------------------------|-----|------|-------|
| Tolerance Unless Noted |     |      |       |
|                        | .0  | .00  | .000  |
| inch                   | ±.1 | ±.01 | ±.005 |

[ ] Dimensions for Reference Only



| Contact Quantity |       | Dimension A<br>+0.00 [ +0.00 ]<br>-0.25 [ -.064 ] |
|------------------|-------|---|
| 1 Row            | 2 Row |   |
|                  | 04    | 0.20 [ 5.08 ]                                     |
| 03               | 06    | 0.30 [ 7.62 ]                                     |
| 04               | 08    | 0.40 [ 10.16 ]                                    |
| 05               | 10    | 0.50 [ 12.70 ]                                    |
| 06               | 12    | 0.60 [ 15.24 ]                                    |
| 07               | 14    | 0.70 [ 17.78 ]                                    |
| 08               | 16    | 0.80 [ 20.32 ]                                    |
| 09               | 18    | 0.90 [ 22.86 ]                                    |
| 10               | 20    | 1.00 [ 25.40 ]                                    |
| 11               | 22    | 1.10 [ 27.94 ]                                    |
| 12               | 24    | 1.20 [ 30.48 ]                                    |
| 14               | 28    | 1.40 [ 35.56 ]                                    |
| 15               | 30    | 1.50 [ 38.10 ]                                    |
| 16               | 32    | 1.60 [ 40.64 ]                                    |
| 17               | 34    | 1.70 [ 43.18 ]                                    |
| 18               | 36    | 1.80 [ 45.72 ]                                    |
| 19               | 38    | 1.90 [ 48.26 ]                                    |
| 20               | 40    | 2.00 [ 50.80 ]                                    |
| 21               | 42    | 2.10 [ 53.34 ]                                    |
| 22               | 44    | 2.20 [ 55.88 ]                                    |
| 23               | 46    | 2.30 [ 58.42 ]                                    |
| 24               | 48    | 2.40 [ 60.96 ]                                    |
| 25               | 50    | 2.50 [ 63.50 ]                                    |
| 26               | 52    | 2.60 [ 66.04 ]                                    |
| 27               | 54    | 2.70 [ 68.58 ]                                    |
| 28               | 56    | 2.80 [ 71.12 ]                                    |
| 29               | 58    | 2.90 [ 73.66 ]                                    |
| 30               | 60    | 3.00 [ 76.20 ]                                    |
| 31               | 62    | 3.10 [ 78.74 ]                                    |
| 32               | 64    | 3.20 [ 81.28 ]                                    |
| 33               | 66    | 3.30 [ 83.82 ]                                    |
| 34               | 68    | 3.40 [ 86.36 ]                                    |
| 35               | 70    | 3.50 [ 88.90 ]                                    |
| 36               | 72    | 3.60 [ 91.44 ]                                    |
| 37               | 74    | 3.70 [ 93.98 ]                                    |
| 38               | 76    | 3.80 [ 96.52 ]                                    |
| 39               | 78    | 3.90 [ 99.06 ]                                    |
| 40               | 80    | 4.00 [ 101.60 ]                                   |

**Notes:**

1. It is recommended that the plated thru-hole on the ends be .062" [1.57] to .063" [1.60]. This will prevent the connector from floating during the wave soldering process.
2. Integral solder mask plugs are removed after soldering by using the 3M™ Hand Tool 929013 with the 3M™ Molded Head 929025-0X-XX or 3M™ Hand Tool 929012 with the 3M™ Press 929050.
3. Do not hand solder this connector because the solder heat and volume of solder cannot be adequately controlled. This would make the integral plugs difficult or impossible to remove.
4. The connector should be flow soldered such that it enters the solder wave, end first (width).

**Ordering Information**

**929XXX-01-XX-XX**

Plating Options:  
 1 Row    2 Row  
 841 = Gold    842 = Gold

Contact Quantity:  
 (per row) see table

Gold Plating Thickness:  
 10 = Wiping Area 10 μm [0.25 μm] gold with tin-lead tails (RIA E3 & C2 apply)  
 30 = Wiping Area 30 μm [0.76 μm] gold with tin-lead tails (RIA E3 & C2 apply)  
 RA = 10 μm [0.25 μm] gold wiping area with matte tin tails (RIA E1 & C1 apply)  
 RB = 30 μm [0.76 μm] gold wiping area with matte tin tails (RIA E1 & C1 apply)

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 Sheet 2 of 2

## Regulatory Information Appendix 3M Electronic Solutions Division/Interconnect

### EUROPE

#### **Appendix E1: European Union RoHS**

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

**This product is RoHS Compliant 2005/95/EC.**

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

#### **Appendix E2: European Union RoHS**

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

**This product contains lead in the compliant pin area in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/747/EC.**

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

#### **Appendix E3: European Union RoHS**

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment as amended by Commission Decision 2005/618/EC.

**This product contains lead in the solder tab area in excess of the maximum concentration value allowed.**

Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

#### **Appendix E4: European Union RoHS**

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

**This product contains decaBDE in the insulating material in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/17/EC.**

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.



**Appendix C1: China RoHS**

Electronic Industry Standard of the People’s Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does not** contain any of the following substances in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.



**Appendix C2: China RoHS**

Electronic Industry Standard of the People’s Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does** contain a substance, as detailed in the chart below, in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

The numerical reference in the symbol above should not be construed as a representation regarding the product’s life or an extension of a product warranty. The product warranty is stated below. In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the product Warranty stated below.

产品中有毒有害物质或元素的名称及含量 (Name and Content of Hazardous Substances or Elements)

| 部件名称<br>(Part or Component Name)  | 有毒有害物质或元素 (Hazardous Substances or Elements) |        |              |            |              |
|---|--|--------|--------------|------------|--------------|
|   | 铅 (Pb)                                       | 镉 (Cd) | 六价铬 (Cr(VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 端子镀层 (contact plating)  | ○  | ○      | ○            | ○          | ○            |
| ○: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。(Indicates that this hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.)<br>×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。(Indicates that this hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.) |  |        |              |            |              |

**Important Notice**

All statements, technical information, and recommendations related to 3M’s products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M’s current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

**Warranty; Limited Remedy; Limited Liability.**

This product will be free from defects in material and manufacture for a period of ninety (90) days from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M’s option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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