

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 4 to 80 circuits
- Stackable side-to-side and end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Drawn .025" square wire provides 4-sided smooth surface for quality interface
- For high temperature version contact Molex, engineering series 70280

Reference Information

Product Specification: PS-8624

Packaging: Bag

UL File No.: E29179 (G)

CSA File No.: LR19980A

Mates With: 7859 Shunts, C-Grid Receptacles, SL Crimp and IDT Housings

Designed In: Inches

Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 15mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Pin Retention to Header: 17.79N (4 lb)

Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical

Housing: Glass-filled polyester, UL 94V-0

Contact: Phosphor Bronze

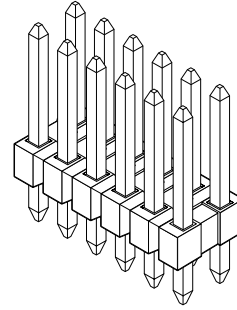
Plating: See Table

Operating Temperature: -40 to +105°C

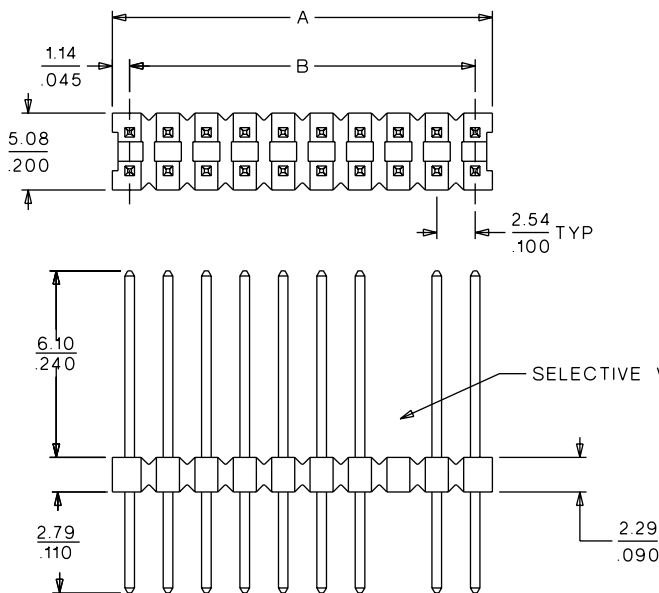
molex® 2.54mm (.100") Pitch C-Grid® Breakaway Header

8624

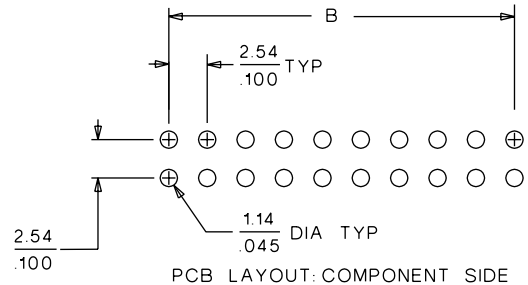
Dual Row, Vertical



CATALOG DRAWING (FOR REFERENCE ONLY)



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

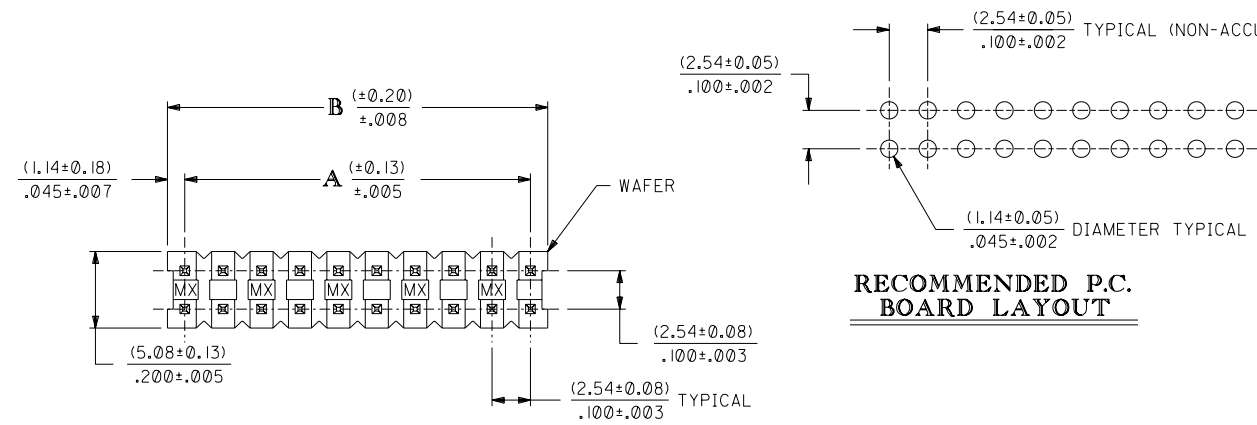
| Circuits | Dimension | |
|----------|---------------|---------------|
| | A | B |
| 4 | 4.83 (.190) | 2.54 (.100) |
| 6 | 7.37 (.290) | 5.08 (.200) |
| 8 | 9.91 (.390) | 7.62 (.300) |
| 10 | 12.45 (.490) | 10.16 (.400) |
| 12 | 14.99 (.590) | 12.70 (.500) |
| 14 | 17.53 (.690) | 15.24 (.600) |
| 16 | 20.07 (.790) | 17.78 (.700) |
| 18 | 22.61 (.890) | 20.32 (.800) |
| 20 | 25.15 (.990) | 22.86 (.900) |
| 22 | 27.69 (1.090) | 25.40 (1.000) |
| 24 | 30.23 (1.190) | 27.94 (1.100) |
| 26 | 32.77 (1.290) | 30.48 (1.200) |
| 28 | 35.31 (1.390) | 33.02 (1.300) |

| Circuits | Dimension | |
|----------|---------------|---------------|
| | A | B |
| 30 | 37.85 (1.490) | 35.56 (1.400) |
| 32 | 40.39 (1.590) | 38.10 (1.500) |
| 34 | 42.93 (1.690) | 40.64 (1.600) |
| 36 | 45.47 (1.790) | 43.18 (1.700) |
| 38 | 48.01 (1.890) | 45.72 (1.800) |
| 40 | 50.55 (1.990) | 48.26 (1.900) |
| 42 | 53.09 (2.090) | 50.80 (2.000) |
| 44 | 55.63 (2.190) | 53.34 (2.100) |
| 46 | 58.17 (2.290) | 55.88 (2.200) |
| 48 | 60.71 (2.390) | 58.42 (2.300) |
| 50 | 63.25 (2.490) | 60.96 (2.400) |
| 52 | 65.79 (2.590) | 63.50 (2.500) |
| 54 | 68.33 (2.690) | 66.04 (2.600) |

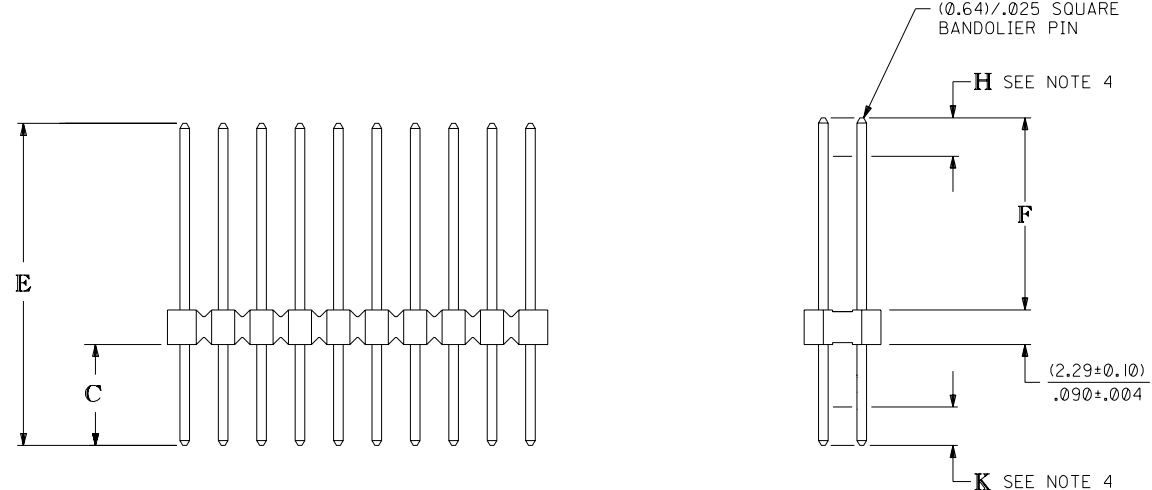
| Circuits | Dimension | |
|----------|----------------|---------------|
| | A | B |
| 56 | 70.87 (2.790) | 68.58 (2.700) |
| 58 | 73.41 (2.890) | 71.12 (2.800) |
| 60 | 75.95 (2.990) | 73.66 (2.900) |
| 62 | 78.49 (3.090) | 76.20 (3.000) |
| 64 | 81.03 (3.190) | 78.74 (3.100) |
| 66 | 83.57 (3.290) | 81.28 (3.200) |
| 68 | 86.11 (3.390) | 83.82 (3.300) |
| 70 | 88.65 (3.490) | 86.36 (3.400) |
| 72 | 91.19 (3.590) | 88.90 (3.500) |
| 74 | 93.73 (3.690) | 91.44 (3.600) |
| 76 | 96.27 (3.790) | 93.98 (3.700) |
| 78 | 98.81 (3.890) | 96.52 (3.800) |
| 80 | 101.35 (3.990) | 99.06 (3.900) |

| Plating Option | Order No. |
|--|--------------|
| 15μ min. select Gold | • 10-89-1XX1 |
| 30μ min. select Gold | • 10-89-2XX1 |
| 150μ Tin/Lead, Nickel overall | • 10-88-1XX1 |
| 5μ min. Gold flash | • 10-89-9XX7 |
| Replace XX with no. of circuits, 04-80 (even only), for 2-circuit, see 42375 | |

• US Standard Product, available through Molex franchised distributors



RECOMMENDED P.C. BOARD LAYOUT



| CKT. SIZE | DIMENSION A | | DIMENSION B | |
|-----------|-------------|-------|-------------|-------|
| | (MM) | INCH | (MM) | INCH |
| 4 | (2.54) | .100 | (4.83) | .190 |
| 6 | (5.08) | .200 | (7.37) | .290 |
| 8 | (7.62) | .300 | (9.91) | .390 |
| 10 | (10.16) | .400 | (12.45) | .490 |
| 12 | (12.70) | .500 | (14.99) | .590 |
| 14 | (15.24) | .600 | (17.53) | .690 |
| 16 | (17.78) | .700 | (20.07) | .790 |
| 18 | (20.32) | .800 | (22.61) | .890 |
| 20 | (22.86) | .900 | (25.15) | .990 |
| 22 | (25.40) | 1.000 | (27.69) | 1.090 |
| 24 | (27.94) | 1.100 | (30.23) | 1.190 |
| 26 | (30.48) | 1.200 | (32.77) | 1.290 |
| 28 | (33.02) | 1.300 | (35.31) | 1.390 |
| 30 | (35.56) | 1.400 | (37.85) | 1.490 |
| 32 | (38.10) | 1.500 | (40.39) | 1.590 |
| 34 | (40.64) | 1.600 | (42.93) | 1.690 |
| 36 | (43.18) | 1.700 | (45.47) | 1.790 |
| 38 | (45.72) | 1.800 | (48.01) | 1.890 |
| 40 | (48.26) | 1.900 | (50.55) | 1.990 |
| 42 | (50.80) | 2.000 | (53.09) | 2.090 |
| 44 | (53.34) | 2.100 | (55.63) | 2.190 |
| 46 | (55.88) | 2.200 | (58.17) | 2.290 |
| 48 | (58.42) | 2.300 | (60.71) | 2.390 |
| 50 | (60.96) | 2.400 | (63.25) | 2.490 |
| 52 | (63.50) | 2.500 | (65.79) | 2.590 |
| 54 | (66.04) | 2.600 | (68.33) | 2.690 |
| 56 | (68.58) | 2.700 | (70.87) | 2.790 |
| 58 | (71.12) | 2.800 | (73.41) | 2.890 |
| 60 | (73.66) | 2.900 | (75.95) | 2.990 |
| 62 | (76.20) | 3.000 | (78.49) | 3.090 |
| 64 | (78.74) | 3.100 | (81.03) | 3.190 |
| 66 | (81.28) | 3.200 | (83.57) | 3.290 |
| 68 | (83.82) | 3.300 | (86.11) | 3.390 |
| 70 | (86.36) | 3.400 | (88.65) | 3.490 |
| 72 | (88.90) | 3.500 | (91.19) | 3.590 |
| 74 | (91.44) | 3.600 | (93.73) | 3.690 |
| 76 | (93.98) | 3.700 | (96.27) | 3.790 |
| 78 | (96.52) | 3.800 | (98.81) | 3.890 |
| 80 | (99.06) | 3.900 | (101.35) | 3.990 |

NOTES:

- PIN PUSHOUT FORCE: 4 LBS. MINIMUM (IN EITHER DIRECTION)
- FOR ILLUSTRATION PURPOSES, 20 (DUAL 10) CIRCUIT SIZE IS SHOWN.
- PINS MUST MEET MOLEX SOLDERABILITY SPECIFICATION ES-152, EXCEPT VOIDS ARE PERMISSIBLE AT BANDOLIER PIN FAYING SURFACE (APPROX. .025 LONG X .006 WIDE REF.- 2 LOCATIONS).
- MEASURE POINT FOR PLATING THICKNESS.
- THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-8624.
- PACKAGING INFORMATION: (UNLESS OTHERWISE NOTED IN TABLES) PER PACKAGING DRAWING NO. PK-70873-0353 BULK PACKAGED IN BAGS

FINISH (PER ES-88):

- (164) - .000150 MINIMUM TIN/LEAD PLATE OVER .000050 MINIMUM NICKEL PLATE.
- (571) - .000015 MINIMUM GOLD PLATE IN SELECT AREA, .000075 MINIMUM TIN/LEAD PLATE IN SELECT AREA, OVER .000050 MINIMUM NICKEL PLATE OVERALL.
- (574) - .000030 MINIMUM GOLD PLATE IN SELECT AREA, .000075 MINIMUM TIN/LEAD PLATE IN SELECT AREA, OVER .000050 MINIMUM NICKEL PLATE OVERALL.
- (561) - .000030 MINIMUM GOLD PLATE IN SELECT AREAS OVER .000050 MINIMUM NICKEL PLATE OVERALL.
- (544) - .000005 MINIMUM GOLD FLASH IN SELECT AREA, .000075 MINIMUM TIN/LEAD PLATE IN SELECT AREA, OVER .000050 MINIMUM NICKEL PLATE OVERALL.

MATERIAL:

WAFER - GLASS FILLED POLYESTER; UL94V-0; COLOR: BLACK
 PIN - PHOSPHOR BRONZE

MFG, SH, REV, LTR, REVISIONS

REVISIONS

| | | |
|---|----|--|
| 7 | LI | |
| 6 | M | |
| 5 | LI | |
| 4 | LI | |
| 3 | LI | |
| 2 | LI | |
| 1 | M | |

UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°

| PLATE | INCH | METRIC |
|-------|--------|--------|
| 3 | ± .005 | |
| 2 | ± .01 | ± 0.13 |
| 1 | | ± 0.25 |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DRWG. NO. SEE CHARTS SDA-8624-0001-5000

FILE NAME: S8624X1

DATE: 11/30/88

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

M ADD 086241275 S.6 EGN #UCP2003-2236 RWHITE 03/04/17

LI ADD TOLERANCES EGN #UDT1999-0410 DMORGAN 98/12/02

L ADD NEW 8 CKT OPT EGN #UDT1999-0206 DMORGAN 98/09/16

K CREATED SHEET 7 ECR #U80308 MCCRATH 97/07/15

JI ADD A-8624-1253 ECR U7-0642 MCFARLAN 97/1/3

J PER ECR # U40616 SCARTH 96/12/04

I REVISD PER ECR NO U73000 BARKER 10/28/96

H REVISD PER ECR NO U61415 TSE 05/10/96

G REVISD PLATE 588 PER ECR NO U60907 96/02/01 BMS

F CHANGED PACKAGING PER ECR NO U160549 11-03-95 DB/BJ

E3 ADDED -1201/-1240 PER ECR NO U60344 09-11-95 BJS

E2 ADDED EDP NO'S PER ECR # U60272 95/08/25 CAC

E1 ADDED EDP - 8032 PER ECR #U51312 95/06/29 CAC

E CHANGED PIN DIMEN PER ECR NO U50305 10-04-94 BJS

DI ADDED -0681/-0720 PER ECR NO U50168 09-09-94 BJS

D REVISD NOTE #6 PER ECR #U40640 06/16/94 BARKER

CI ADDED -09288-0933 PER ECR #U40683 05/27/94 REED

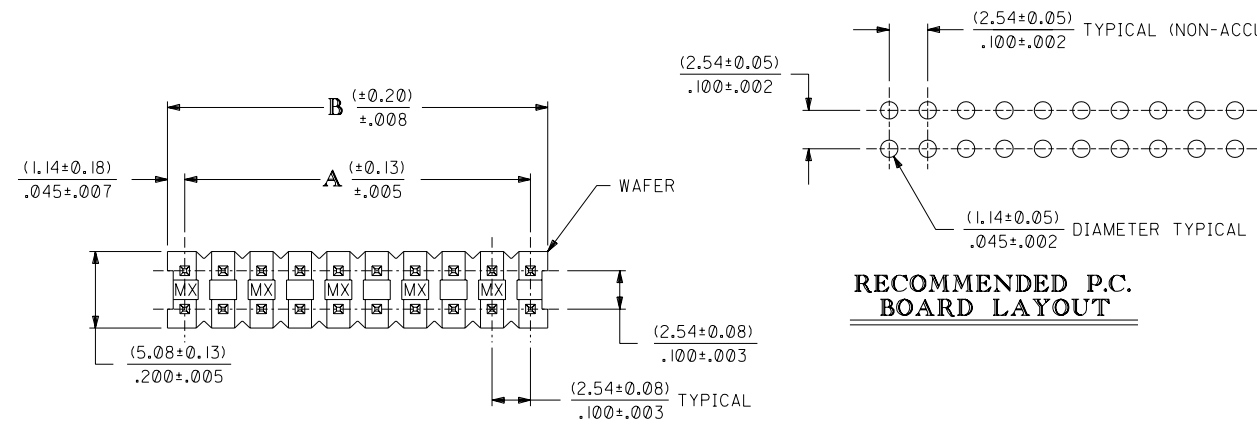
C DELETED/ADDED EDP'S PER ECR # U40295 03/01/94 REED

BI ADDED EDP NOS. PER ECR # U31521 10/15/93 REED

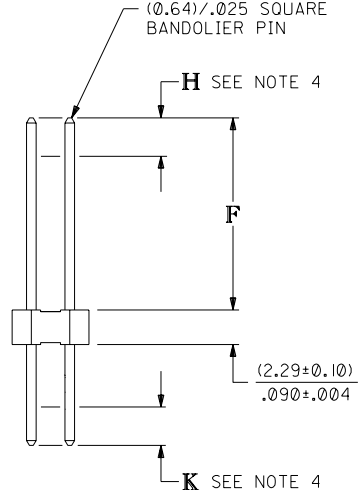
B REVISD PER ECR # U30385 05/17/93 REED

A RELEASED PER ECR # U30114 02/03/93 MGB

8624



RECOMMENDED P.C. BOARD LAYOUT



| CKT. SIZE | DIMENSION A | | DIMENSION B | |
|-----------|-------------|--------|-------------|--------|
| | (MM) | (INCH) | (MM) | (INCH) |
| 4 | (2.54) | .100 | (4.83) | .190 |
| 6 | (5.08) | .200 | (7.37) | .290 |
| 8 | (7.62) | .300 | (9.91) | .390 |
| 10 | (10.16) | .400 | (12.45) | .490 |
| 12 | (12.70) | .500 | (14.99) | .590 |
| 14 | (15.24) | .600 | (17.53) | .690 |
| 16 | (17.78) | .700 | (20.07) | .790 |
| 18 | (20.32) | .800 | (22.61) | .890 |
| 20 | (22.86) | .900 | (25.15) | .990 |
| 22 | (25.40) | 1.000 | (27.69) | 1.090 |
| 24 | (27.94) | 1.100 | (30.23) | 1.190 |
| 26 | (30.48) | 1.200 | (32.77) | 1.290 |
| 28 | (33.02) | 1.300 | (35.31) | 1.390 |
| 30 | (35.56) | 1.400 | (37.85) | 1.490 |
| 32 | (38.10) | 1.500 | (40.39) | 1.590 |
| 34 | (40.64) | 1.600 | (42.93) | 1.690 |
| 36 | (43.18) | 1.700 | (45.47) | 1.790 |
| 38 | (45.72) | 1.800 | (48.01) | 1.890 |
| 40 | (48.26) | 1.900 | (50.55) | 1.990 |
| 42 | (50.80) | 2.000 | (53.09) | 2.090 |
| 44 | (53.34) | 2.100 | (55.63) | 2.190 |
| 46 | (55.88) | 2.200 | (58.17) | 2.290 |
| 48 | (58.42) | 2.300 | (60.71) | 2.390 |
| 50 | (60.96) | 2.400 | (63.25) | 2.490 |
| 52 | (63.50) | 2.500 | (65.79) | 2.590 |
| 54 | (66.04) | 2.600 | (68.33) | 2.690 |
| 56 | (68.58) | 2.700 | (70.87) | 2.790 |
| 58 | (71.12) | 2.800 | (73.41) | 2.890 |
| 60 | (73.66) | 2.900 | (75.95) | 2.990 |
| 62 | (76.20) | 3.000 | (78.49) | 3.090 |
| 64 | (78.74) | 3.100 | (81.03) | 3.190 |
| 66 | (81.28) | 3.200 | (83.57) | 3.290 |
| 68 | (83.82) | 3.300 | (86.11) | 3.390 |
| 70 | (86.36) | 3.400 | (88.65) | 3.490 |
| 72 | (88.90) | 3.500 | (91.19) | 3.590 |
| 74 | (91.44) | 3.600 | (93.73) | 3.690 |
| 76 | (93.98) | 3.700 | (96.27) | 3.790 |
| 78 | (96.52) | 3.800 | (98.81) | 3.890 |
| 80 | (99.06) | 3.900 | (101.35) | 3.990 |

| | |
|----|--|
| M | ADD 086241275 S.36 EGN #UCP2003-2236 RWHITE 03/04/17 |
| LI | ADDED TOLERANCES EGN #UDT1999-0410 DMORGAN 98/12/02 |
| L | ADD NEW 8 CKT OPT EGN #UDT1999-0206 DMORGAN 98/09/16 |
| K | CREATED SHEET 7 ECR #U80308 MCCRATH 97/07/15 |
| JI | ADD A-8624-1253 ECR U7-0642 MCFARLAN 97/1/3 |
| J | REVISD PER ECR # U40616 SCARTH 96/12/04 |
| I | REVISD PER ECR NO U73000 BARKER 10/28/96 |
| H | REVISD PER ECR NO U61415 TSE 05/10/96 |
| G | REVISD PLATE 588 PER ECR NO U60907 96/02/01 BMS |
| F | CHANGED PACKAGING PER ECR NO U160549 11-03-95 DB/BSJ |
| E3 | ADDED -1201/-1240 PER ECR NO U60344 09-11-95 BJS |
| E2 | ADDED EDP NO'S PER ECR # U60272 95/08/25 CAC |
| E1 | ADDED EDP - 8032 PER ECR #U51312 95/06/29 CAC |
| E | CHANGED PIN DIMEN PER ECR NO U50305 10-04-94 BJS |
| D1 | ADDED -0681/-0720 PER ECR NO U50168 09-09-94 BJS |
| D | REVISD NOTE #6 PER ECR #U40640 06/16/94 BARKER |
| CI | ADDED -09288-0933 PER ECR #U40683 05/27/94 REED |
| C | DELETED/ADDED EDP'S PER ECR # U40295 03/01/94 REED |
| BI | ADDED EDP NOS. PER ECR # U31521 10/15/93 REED |
| B | REVISD PER ECR # U30385 05/17/93 REED |
| A | RELEASED PER ECR # U30114 02/03/93 MGB |

NOTES:

- PIN PUSHOUT FORCE: 4 LBS. MINIMUM (IN EITHER DIRECTION)
- FOR ILLUSTRATION PURPOSES, 20 (DUAL 10) CIRCUIT SIZE IS SHOWN.
- PINS MUST MEET MOLEX SOLDERABILITY SPECIFICATION ES-152, EXCEPT VOIDS ARE PERMISSIBLE AT BANDOLIER PIN FAYING SURFACE (APPROX. .025 LONG X .006 WIDE REF.- 2 LOCATIONS).
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MATERIAL:

- WAFER - GLASS FILLED POLYESTER; UL94V-0; COLOR: BLACK
- PIN - PHOSPHOR BRONZE

MFG, SH, REV, LTR, REVISIONS

▽ = 0 ▼ = 0 REVISE ONLY ON CAD SYSTEM

TITLE: SALES ASSY-DUAL ROW WAFER W/BREAK-OFF OPTION .025 SQ. PINS/.100 GRID

MOLEX INCORPORATED SHEET NO. DATE U.S.A. 1 OF 7 11/30/88

DRWG. NO. SDA-8624-0001-5000

DRWG. BY: EIK CHK'D. BY: AAB FILE NAME: 58624X1

APPR'D. BY: WAZ SCALE: 4 : 1 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

