

3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES



TABLE 1: VERTICAL THRU

| No. Positions | Dim "A" | Dim "B" | Dim "C" |
|---------------|---------|---------|---------|
| 4 | .050 | .215 | .270 |
| 6 | .100 | .265 | .320 |
| 8 | .150 | .315 | .370 |
| 10 | .200 | .365 | .420 |
| 12 | .250 | .415 | .470 |
| 14 | .300 | .465 | .520 |
| 16 | .350 | .515 | .570 |
| 20 | .450 | .615 | .670 |
| 30 | .700 | .865 | .920 |

- NOTES
- MATERIAL: BODY: LCP, UL94V-0
LATCH: PPA, UL94V-0
CONTACTS: COPPER ALLOY.
 - PLATING: 50-150µ" NICKEL UNDERPLATE
30 = 30µ" GOLD MIN. ON WIPING AREA WITH 200µ" MATTE TIN ON SOLDER TAIL
00 = GOLD FLASH ON WIPING AREA WITH 100-140µ" MATTE TIN ON SOLDER TAIL.
 - MATING COMPATIBILITY: 3M 1.27mm (0.050"), 451 SERIES RIBBON CABLE SOCKET. TECH SHEET 2436
 - REGULATORY INFORMATION: ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION (RIA E1 & C1 APPLY)
 - IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
 - REFERENCE PRODUCT SPEC: 3M DOC ID# 78-5102-0091-4
 - OTHER PIN COUNTS AVAILABLE UPON REQUEST. CONTACT 3M.
 - UNLESS OTHERWISE NOTED, REFERENCES TO INDUSTRY SPECIFICATIONS ARE INTENDED TO INDICATE SUBSTANTIAL COMPLIANCE TO THE MATERIAL ELEMENTS OF THE SPECIFICATION. SUCH REFERENCES SHOULD NOT BE CONSTRUED AS A GUARANTEE OF COMPLIANCE TO ALL REQUIREMENTS IN A GIVEN SPECIFICATION.
 - PACKAGING: VERTICAL THRU: TRAY
RIGHT ANGLE THRU: TRAY
VERTICAL SMT: TAPE AND REEL.

THRU BOARD, VERTICAL WITH LOW PROFILE LATCH/EJECT OPTION



THRU BOARD, VERTICAL



POLARIZATION AND FRICTION LATCHING POSITIONS 8-30 ONLY



WITH LATCH/EJECT



RECOMMENDED BOARD LAYOUT

PERFORMANCE:

CURRENT RATING: 1.0 A, ALL LINES ENERGIZED, 30°C TEMP RISE PER EIA 364-70
1.5 A, 6 LINES ENERGIZED, 30°C TEMP RISE PER EIA 364-70
2.5 A, 1 LINE ENERGIZED, 30°C TEMP RISE PER EIA 364-70

UL & CUL VOLTAGE RATING: 125V_{ac}
INSULATION RESISTANCE: > 1 × 10⁹ Ohms AT 500 VDC
WITHSTANDING VOLTAGE: 1250VACrms AT SEA LEVEL
OPERATING TEMPERATURE: -65°C to +125°C
UL & CUL OPERATING TEMPERATURE: +125°C
PROCESSING TEMPERATURE: 260°C
LEAD-FREE SOLDERABLE: YES
MOISTURE SENSITIVITY LEVEL: MSL1 PER J-STD-020

452 XX - X X 0 2 XX
SERIES
POSITION COUNT
04 - 30
SEE TABLE 1

PLATING
00 = AU FLASH
30 = 30µ" GOLD

CONTACT TAIL
2 = STANDARD (.094")

PART CONFIG. AND PACKAGING
6 = VERTICAL THRU HOLE, TRAY PACKAGING
5 = RIGHT ANGLE THRU HOLE, TRAY PACKAGING
2 = VERTICAL SMT, TAPE AND REEL WITH VAC CAP

LATCH/EJECT
0 = NO LATCHES
2 = WITH LOW PROFILE LATCHES

3M ELECTRONIC MATERIALS SOLUTIONS DIVISION
INTERCONNECT SOLUTIONS
<http://www.3mconnectors.com>

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FOR TECHNICAL, SALES OR ORDERING
INFORMATION CALL 800-225-5373

78-5100-2436-3
78-5100-2396-9

| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|-----|-------|--|------|------|
| F | 56988 | SEP 24, 2014 REVISE PERFORMANCE CHART | JNC | SN |
| E | 54514 | JUN 19, 2014 ADD UL LOGO, ADD 56MM T&R | SJS | SAN |
| D | 51884 | JAN 08, 2014 ADD DESIGN REF, UPDATE TITLE | SJS | SAN |
| C | 50290 | OCT 08, 2013 REVISE NOTE 1, 9 & OPERATING TEMP. | JNC | SN |
| B | 48635 | JUL 12, 2013 MATCH TEXT FONTS & ADD NOTE 9 | JNC | SN |
| A | 46797 | MAR 25, 2013 PRODUCTION RELEASE | JNC | SAN |

DESIGN REFERENCE NEXT ASSEMBLY

DO NOT SCALE DRAWING

SCALE 6-1

TOLERANCES EXCEPT AS NOTED

INCHES: .00 ±.01, .00 ±.02, .000 ±.010, .0000 ±.0050

MILLIMETERS: 0 ±.05, .00 ±.05, .00 ±.05, .00 ±.05

MAX SURFACE ROUGHNESS: 1.6 µm SURFACES, 3.2 µm MARKED ONLY

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2009

3M
St. Paul, MN 55144

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TITLE: BOARDMOUNT HEADER, .05 X .05 PITCH, L/E, 452 SERIES

CAGE NUMBER: D78-5100-2437-1
SIZE: 1
DRAWING NO.: 78-5100-2437-1
REV. F

MODEL: 1
SHT 1 OF 4

UL FILE NO: E68080

3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES

TABLE 1: RIGHT ANGLE THRU

| No. Positions | Dim "A" | Dim "B" | Dim "C" |
|---------------|---------|---------|---------|
| 4 | .050 | .215 | .270 |
| 6 | .100 | .265 | .320 |
| 8 | .150 | .315 | .370 |
| 10 | .200 | .365 | .420 |
| 12 | .250 | .415 | .470 |
| 14 | .300 | .465 | .520 |
| 16 | .350 | .515 | .570 |
| 20 | .450 | .615 | .670 |
| 30 | .700 | .865 | .920 |



THRU BOARD, RIGHT ANGLE



WITH LATCH/EJECT



RECOMMENDED BOARD LAYOUT

78-5100-2436-3
78-5100-2396-9

DESIGN REFERENCE NEXT ASSEMBLY

| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|-----|-----|----------------------------|------|--------------|
| ARM | | NOV 29, 2012 PRC | | NOV 29, 2012 |
| SAN | | NOV 29, 2012 SAN | | NOV 29, 2012 |

DIVISION CODE

Interconnect Solutions ISD

DO NOT SCALE DRAWING

SCALE 6/1

TOLERANCES EXCEPT AS NOTED

INCHES .0 ± .1

.00 ± .02

.000 ± .010

.0000 ± .0050

MILLIMETERS 0 ±

.0 ±

.00 ±

.00 ±

MARKED ONLY ANGLES ±

| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|-----|-------|---|------|------|
| F | 56988 | SEP 24, 2014 REVISE PERFORMANCE CHART | JNC | SN |
| E | 54514 | JUN 19, 2014 ADD UL LOGO, ADD 56MM T&R | SJS | SAN |
| D | 51884 | JAN 08, 2014 ADD DESIGN REF, UPDATE TITLE | SJS | SAN |
| C | 50290 | OCT 08, 2013 REVISE NOTE 1, 9 & OPERATING TEMP. | JNC | SN |
| B | 48635 | JUL 12, 2013 MATCH TEXT FONTS & ADD NOTE 9 | JNC | SN |
| A | 46797 | MAR 25, 2013 PRODUCTION RELEASE | JNC | SAN |

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3M Center St. Paul, MN 55144

TITLE BOARDMOUNT HEADER, .05 X .05 PITCH, L/E, 452 SERIES

CAGE NUMBER D78-5100-2437-1

REV. F

MODEL

DET. [] IS1S [] YES [] NO [] SHT 2 OF 4

78-5100-2437-1 F REVISION DRAWING NUMBER
AM UTC-05:00
9/24/2014 9:06

3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES

TABLE 1: VERTICAL SMT

| No. Positions | Dim "A" | Dim "B" | Dim "C" |
|---------------|---------|---------|---------|
| 4 | .050 | .215 | .270 |
| 6 | .100 | .265 | .320 |
| 8 | .150 | .315 | .370 |
| 10 | .200 | .365 | .420 |
| 12 | .250 | .415 | .470 |
| 14 | .300 | .465 | .520 |
| 16 | .350 | .515 | .570 |
| 20 | .450 | .615 | .670 |
| 30 | .700 | .865 | .920 |



SURFACE MOUNT, VERTICAL



RECOMMENDED BOARD LAYOUT



SHROUDED SMT HEADER



VACUUM CAP SEATED ON TOP
EDGES OF END WALLS ON
POSITIONS 4 AND 6



WITH VACUUM CAP



WITH LATCH/EJECT



WITH LATCH/EJECT
AND VACUUM CAP
VACUUM CAP IS FULLY SEATED
ON POSITIONS 8 THRU 30

| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
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| B | 48635 | JUL 12, 2013 MATCH TEXT FONTS & ADD NOTE 9 | JNC | SN |
| A | 46797 | MAR 25, 2013 PRODUCTION RELEASE | JNC | SAN |

78-5100-2436-3
78-5100-2396-9

DESIGN REFERENCE NEXT ASSEMBLY

| DRFT | DATE | DRFT | DATE |
|------|--------------|------|--------------|
| ARM | NOV 29, 2012 | PRC | NOV 29, 2012 |
| SAN | NOV 29, 2012 | SAN | NOV 29, 2012 |

DIVISION: Interconnect Solutions

SCALE: 6/1

TOLERANCES EXCEPT AS NOTED

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2009

MAX SURFACE ROUGHNESS

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TITLE: BOARDMOUNT HEADER, .05 X .05 PITCH, L/E, 452 SERIES

CAGE NUMBER: D78-5100-2437-1

REV. F

78-5100-2437-1 F REVISION
IMAGED: F.1 9/24/2014 9:06 AM UTC-05:00

3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES



TABLE 2
TAPE AND REEL PACKAGING FOR SURFACEMOUNT HEADERS

| POS | LATCHES | DIM. "F" | DIM. K ₀ | DIM. S ₀ | DIM. "W" |
|-----|---------|----------|---------------------|---------------------|----------------|
| 4 | NO | .453 | .263 | .876 | .945 [24MM] |
| 4 | YES | .453 | .300 | .876 | 1.260 [32MM] |
| 6 | NO | .453 | .238 | .876 | .945 [24MM] |
| 6 | YES | .559 | .300 | 1.118 | 1.260 [32MM] |
| 8 | NO | .453 | .238 | .876 | .945 [24MM] |
| 8 | YES | .559 | .300 | 1.118 | 1.732 [44MM] |
| 10 | NO | .453 | .238 | .876 | .945 [24MM] |
| 10 | YES | .559 | .300 | 1.118 | 1.732 [44MM] |
| 12 | NO | .453 | .238 | .876 | .945 [24MM] |
| 12 | YES | .559 | .300 | 1.118 | 1.732 [44MM] |
| 14 | NO | .453 | .238 | .876 | .945 [24MM] |
| 14 | YES | .795 | .300 | 1.591 | 1.732 [44MM] |
| 16 | NO | .453 | .238 | .876 | .945 [24MM] |
| 16 | YES | .795 | .300 | 1.591 | 1.732 [44MM] |
| 20 | NO | .559 | .238 | 1.118 | 1.260 [32MM] |
| 20 | YES | .795 | .300 | 1.591 | 1.732 [44MM] |
| 30 | NO | .795 | .238 | 1.591 | 1.732 [44MM] |
| 30 | YES | .795 | .300 | 1.591 | 2.205 [56MM] |

NOTE:
LATCH EJECT HEADERS ARE PACKAGED WITH THE LATCHES
IN AN OPEN POSITION.



24MM WIDE POCKET TAPE



32MM, 44MM AND 56MM WIDE POCKET TAPE

78-5100-2436-3
78-5100-2396-9

| | |
|---------------------------------|--|
| DESIGN REFERENCE | NEXT ASSEMBLY |
| ISSUE CODES | ISSUE CODES |
| DIVISION | DIVISION CODE |
| Interconnect Solutions | ISD |
| DO NOT SCALE DRAWING | TOLERANCES EXCEPT AS NOTED |
| THIRD ANGLE PROJECTION | INCHES ±.1 ±.02 ±.010 ±.0050 |
| INTERPRET PER ASME Y14.5 - 2009 | MILLIMETERS 0 ±.00 ±.00 ±.00 |
| MAX SURFACE ROUGHNESS | ANGLES |
| MARKED ONLY | |

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|-----|-------|--|------|------|
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| | | | |
|--------------|------|--------------|--------------|
| DATE | TIME | DATE | DATE |
| NOV 29, 2012 | PRC | NOV 29, 2012 | NOV 29, 2012 |
| DATE | TIME | DATE | DATE |
| NOV 29, 2012 | SAN | NOV 29, 2012 | NOV 29, 2012 |

| | | | |
|--|------|---|-------------------|
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| CAGE NUMBER | SIZE | DRAWING NO. | REV. |
| D | | 78-5100-2437-1 | F |
| MODEL | DET | ISTS | YES NO SHT 4 OF 4 |

78-5100-2437-1 F REVISION DRAWING NUMBER
AM UTC-05:00
9:06 AM 9/24/2014
F.1



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

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- 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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