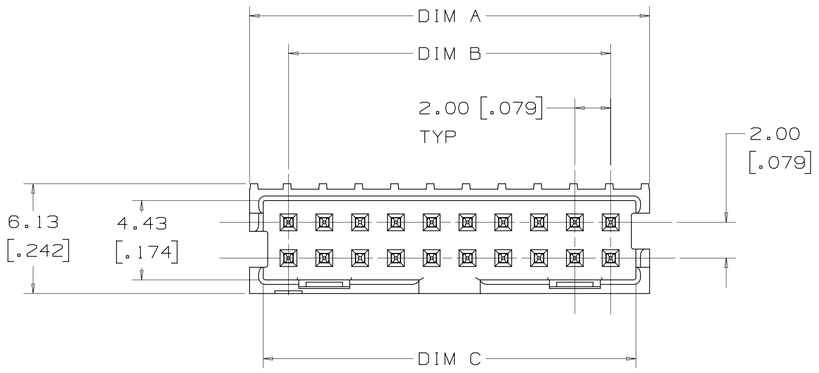
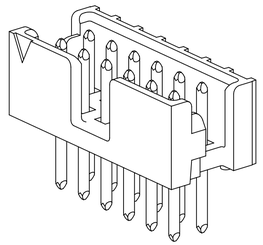
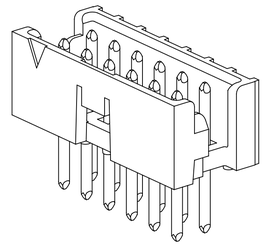
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]

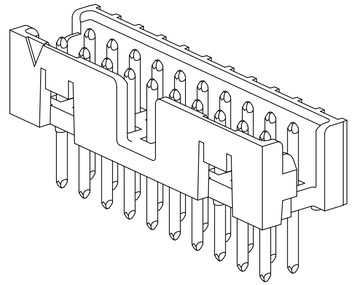




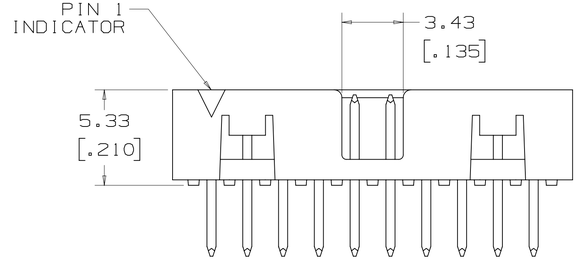
POLARIZATION SLOT
THRU-HOLE VERTICAL HEADER
6-12 POSITIONS ONLY

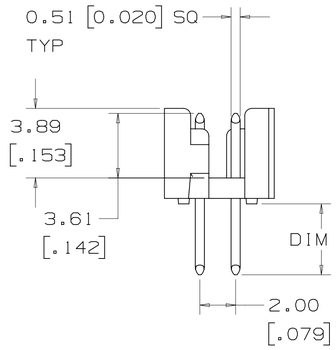


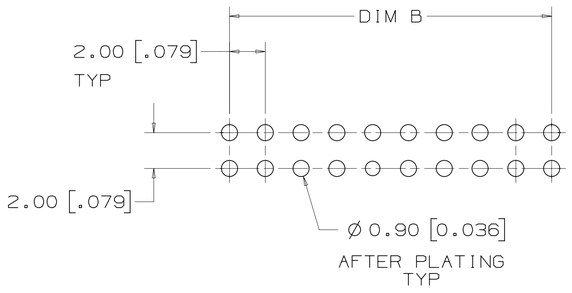
SINGLE FRICTION LATCH
THRU-HOLE VERTICAL HEADER
6-12 POSITIONS ONLY



POLARIZATION SLOT AND
DUAL FRICTION LATCHES
THRU-HOLE VERTICAL HEADER
14-50 POSITIONS







RECOMMENDED PCB HOLE PATTERN
TOLERANCE = 0.05 [.002]

PERFORMANCE [5] [7]	
CURRENT:	1.25 A, ALL LINES ENERGIZED 2.75 A, 6 LINES ENERGIZED 4.75 A, 1 LINE ENERGIZED
INSULATION RESISTANCE:	>1 X 10^9 OHMS AT 500 VDC
WITHSTANDING VOLTAGE:	500 VACrms AT SEA LEVEL
TEMPERATURE RATING:	-55° C TO +105° C
SOLDER PROCESS TEMPERATURE:	260° C MAX PER IPC/JEDEC J-STD-020D

REFERENCE TABLE ON SHEET 5
FOR AVAILABLE POSITIONS AND
SOLDER TAIL LENGTHS

METRIC [ENGLISH]

NOTES

1. MATERIAL:
BODY: HIGH TEMPERATURE GLASS FILLED LCP, BLACK UL94V-0
CONTACTS: COPPER ALLOY

2. PLATING:
2.03-3.81 µm [80-150 µin] NICKEL UNDERPLATE.
0.38 µm [15 µin] OR 0.76 µm [30µin] AVG GOLD ON WIPING AREA.
5.08 µm [200 µin] MIN MATTE TIN ON SOLDER TAILS.

3. STANDARD LENGTH HEADERS MATE WITH 3M™ SOCKETS, 158 SERIES (REFERENCE 3M DRAWING 78-5100-2358-9).

4. EXTENDED LENGTH HEADERS MATE WITH 3M™ SOCKETS, 870 SERIES.

5. FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION SEE 3M 78-5102-0078-1.

6. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "RoHS COMPLIANCE" SECTION OF WWW.3MCONNECTOR.COM FOR COMPLIANCE INFORMATION (RIA E1 & C1 APPLY).

7. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	41488	JUN 20,2012 REVISED CURRENT RATING IN PERFORMANCE TABLE	LDS	SAN
C	39876	APR 18,2012 REMOVED 32 POS FROM TABLE ON SHT 5	LDS	SAN
B	34080	MAY 18,2011 ADDED 6.19 DIM ON SHT 2; REVISED & MOVED TABLE TO SHT 5	LDS	SF
A	30741	OCT 28,2010 INITIAL RELEASE	LDS	SF

DESIGN REFERENCE | NEXT ASSEMBLY
DISTRIBUTION CODES
DIVISION | DIVISION CODE
DRFT: L. SCHMIDT DATE: JUL 29,2010 MFG DATE:
CHKD DATE: APPVL: S FELDMAN DATE: AUG 09,2010
DO NOT SCALE DRAWING | SCALE 6:1
TOLERANCES EXCEPT AS NOTED
INCHES .0 ± .00 ± .000 ± .0000 ±
THIRD ANGLE PROJECTION
INTERPRET PER ASME Y14.5 - 1994
MILLIMETERS 0 ± .0 ± .00 ± 0.13 .000 ± 0.025
MAX SURFACE ROUGHNESS 125 ☐ ALL SURFACES ☒ MARKED ONLY
ANGLES ± 1°

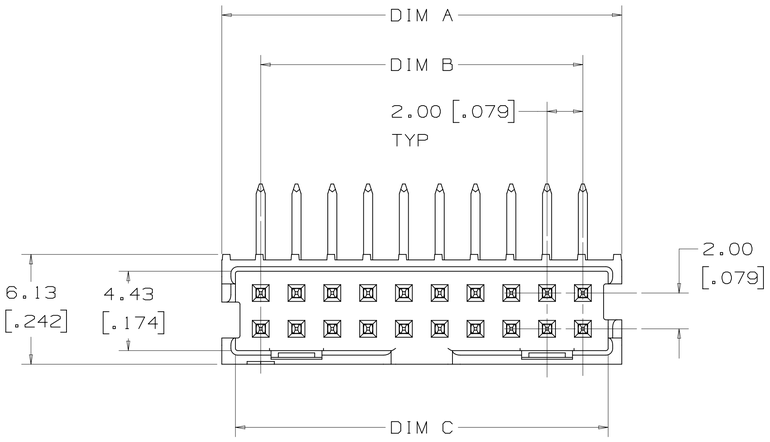
3M 3M Center St. Paul, MN 55144
© 3M COPYRIGHT 2010
This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.

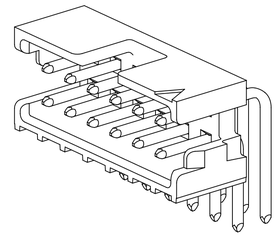
TITLE: 3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2359-7 | REV. D
MODEL | DET. LISTS ☐ YES ☒ NO | SHT 1 OF 5

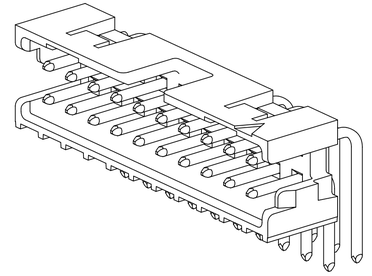
78-5100-2359-7 DRAWING NUMBER | D REVISION

3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]

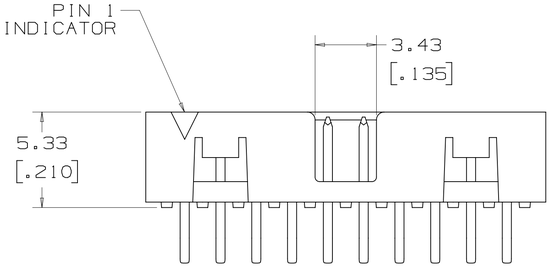


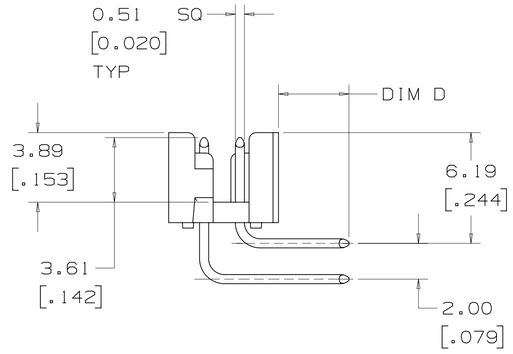


POLARIZATION SLOT
RIGHT ANGLE HEADER
6-12 POSITIONS ONLY

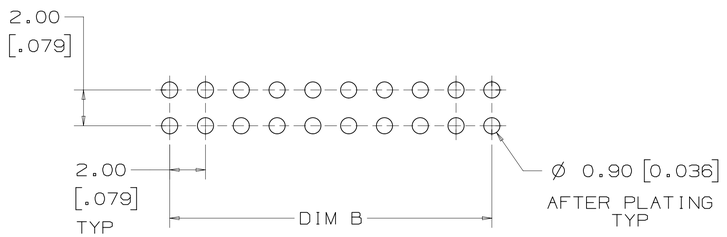


POLARIZATION SLOT AND
DUAL FRICTION LATCHES
RIGHT ANGLE HEADER
14-50 POSITIONS





SINGLE FRICTION LATCH
RIGHT ANGLE HEADER
6-12 POSITIONS ONLY



RECOMMENDED PCB HOLE PATTERN
TOLERANCE = ±0.05 [.002]

REFERENCE TABLE ON SHEET 5
FOR AVAILABLE POSITIONS AND
SOLDER TAIL LENGTHS

METRIC [ENGLISH]

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	41488	JUN 20,2012 REVISED CURRENT RATING IN PERFORMANCE TABLE	LDS	SAN
C	39876	APR 18,2012 REMOVED 32 POS FROM TABLE ON SHT 5	LDS	SAN
B	34080	MAY 18,2011 ADDED 6.19 DIM ON SHT 2; REVISED & MOVED TABLE TO SHT 5	LDS	SF
A	30741	OCT 28,2010 INITIAL RELEASE	LDS	SF

DESIGN REFERENCE | NEXT ASSEMBLY

DRFT: L. SCHMIDT — DATE: JUL 29,2010 — MFG — DATE

CHKD — DATE — APPVL: S FELDMAN — DATE: AUG 09,2010

DISTRIBUTION CODES

DIVISION — DIVISION CODE

DO NOT SCALE DRAWING — SCALE 4/1

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 1994

MAX SURFACE ROUGHNESS 125 √ ☐ ALL SURFACES ☒ MARKED ONLY

TOLERANCES EXCEPT AS NOTED

INCHES: .0 ± / .00 ± / .000 ± / .0000 ±

MILLIMETERS: 0 ± / .0 ± / .00 ± 0.13 / .000 ±

ANGLES ±1°

3M Center, St. Paul, MN 55144

© 3M COPYRIGHT 2010
This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.

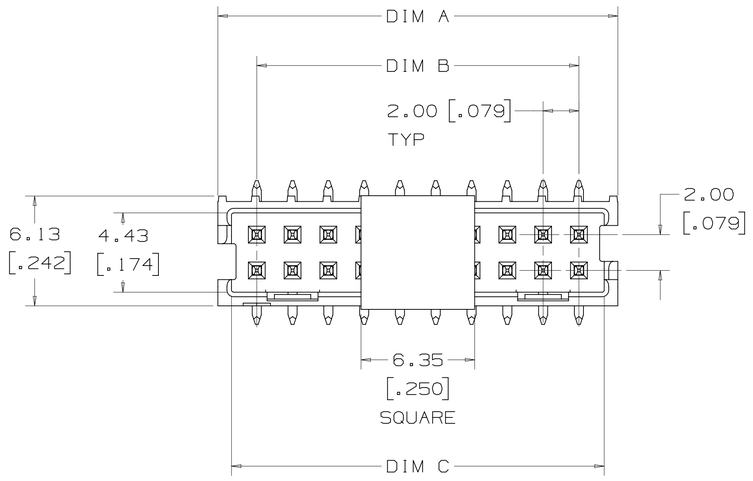
TITLE: 3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES

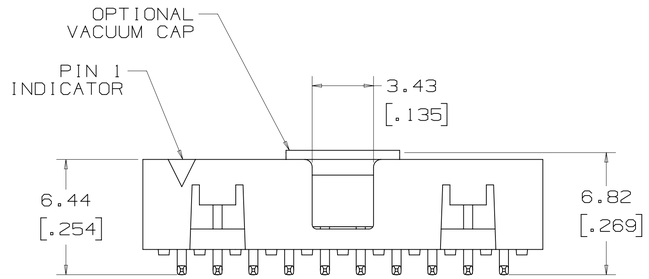
CAGE NUMBER — SIZE: D — DRAWING NO.: 78-5100-2359-7 — REV.: D

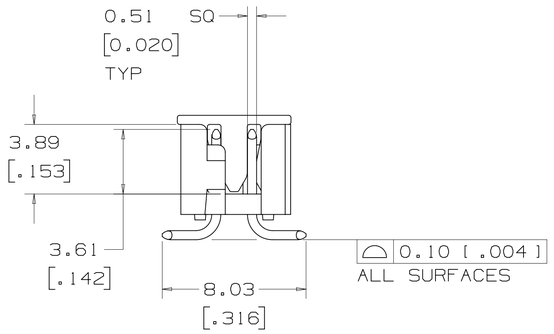
MODEL — DET. LISTS ☐ YES ☒ NO — SHT 2 OF 5

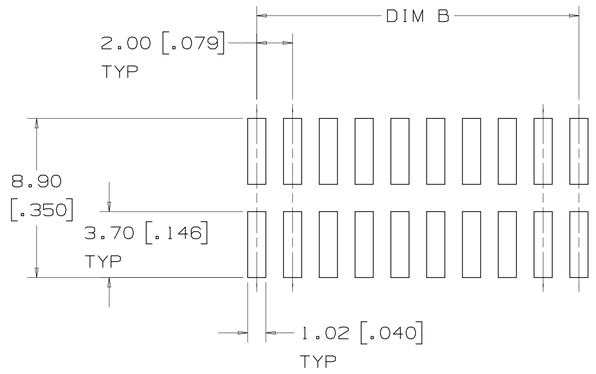
78-5100-2359-7 D
DRAWING NUMBER REVISION

3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length 3 and Extended Length 4

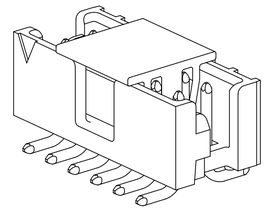




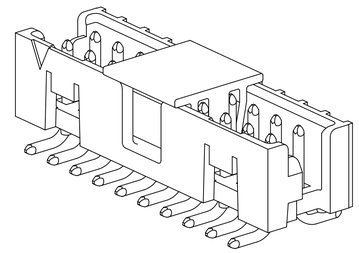




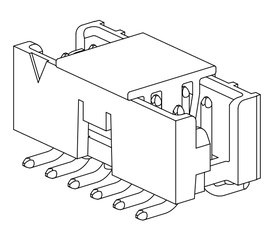
RECOMMENDED PCB PAD PATTERN
TOLERANCE = ±0.08 [.003]



POLARIZATION SLOT
SURFACE MOUNT HEADER
6-12 POSITIONS ONLY



POLARIZATION SLOT AND
DUAL FRICTION LATCHES
SURFACE MOUNT HEADER
14-50 POSITIONS



SINGLE FRICTION LATCH
SURFACE MOUNT HEADER
6-12 POSITIONS ONLY

REFERENCE TABLE ON SHEET 5
FOR AVAILABLE POSITIONS

METRIC [ENGLISH]

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	41488	JUN 20,2012 REVISED CURRENT RATING IN PERFORMANCE TABLE	LDS	SAN
C	39876	APR 18,2012 REMOVED 32 POS FROM TABLE ON SHT 5	LDS	SAN
B	34080	MAY 18,2011 ADDED 6.19 DIM ON SHT 2; REVISED & MOVED TABLE TO SHT 5	LDS	SF
A	30741	OCT 28,2010 INITIAL RELEASE	LDS	SF

DESIGN REFERENCE | NEXT ASSEMBLY

DISTRIBUTION CODES

DIVISION | DIVISION CODE

DRFT L. SCHMIDT DATE JUL 29,2010 | MFG | DATE

CHKD | DATE | APPVL S FELDMAN DATE AUG 09,2010

DO NOT SCALE DRAWING | SCALE 4/1

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 1994

MAX SURFACE ROUGHNESS 125 ☐ ALL SURFACES ☒ MARKED ONLY

TOLERANCES EXCEPT AS NOTED

INCHES
.0 ±
.00 ±
.000 ±
.0000 ±

MILLIMETERS
0 ±
.0 ±
.00 ±0.13
.000 ±

ANGLES ±1°

3M 3M Center St. Paul, MN 55144

© 3M COPYRIGHT 2010
This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.

TITLE: 3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES

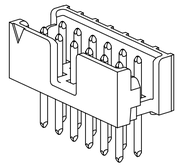
CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2359-7 | REV. D

MODEL | DET. LISTS ☐ YES ☒ NO | SHT 3 OF 5

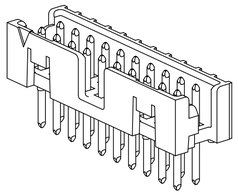
78-5100-2359-7 DRAWING NUMBER | D REVISION

3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3]

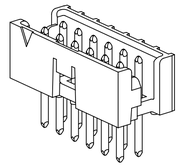
STANDARD LENGTH HEADERS ARE AVAILABLE



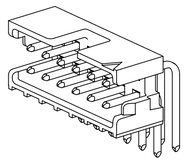
STANDARD LENGTH, POLARIZATION SLOT, VERTICAL HEADER 6-12 POSITIONS ONLY



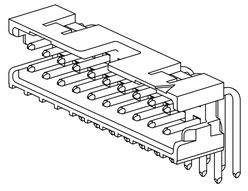
STANDARD LENGTH, POLARIZATION SLOT, DUAL FRICTION LATCHES, VERTICAL HEADER 14-50 POSITIONS



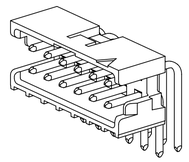
STANDARD LENGTH, SINGLE FRICTION LATCH, VERTICAL HEADER 6-12 POSITIONS



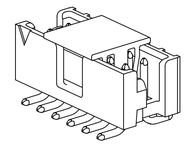
STANDARD LENGTH, POLARIZATION SLOT, RIGHT ANGLE HEADER 6-12 POSITIONS



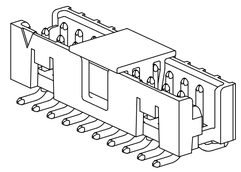
STANDARD LENGTH, POLARIZATION SLOT, DUAL FRICTION LATCHES, RIGHT ANGLE HEADER 14-50 POSITIONS



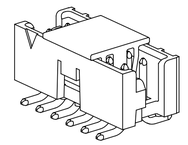
STANDARD LENGTH, SINGLE FRICTION LATCH, RIGHT ANGLE HEADER 6-12 POSITIONS



STANDARD LENGTH, POLARIZATION SLOT, SURFACE MOUNT HEADER 6-12 POSITIONS



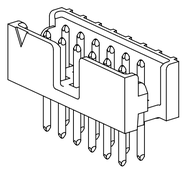
STANDARD LENGTH, POLARIZATION SLOT, DUAL FRICTION LATCHES, SURFACE MOUNT HEADER 14-50 POSITIONS



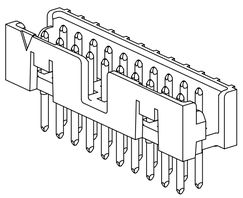
STANDARD LENGTH, SINGLE FRICTION LATCH, SURFACE MOUNT HEADER 6-12 POSITIONS

3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Extended Length [4]

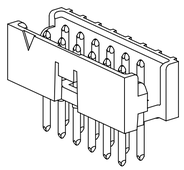
CALL 3M INTERCONNECT SOLUTIONS AT 800-225-5373 FOR AVAILABILITY OF EXTENDED LENGTH HEADERS



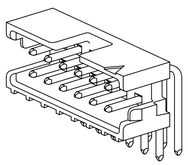
EXTENDED LENGTH, POLARIZATION SLOT, VERTICAL HEADER 6-12 POSITIONS



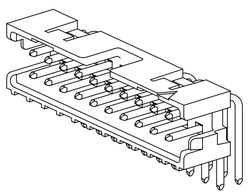
EXTENDED LENGTH, POLARIZATION SLOT, DUAL FRICTION LATCHES, VERTICAL HEADER 14-50 POSITIONS



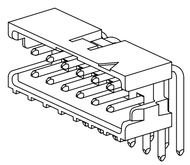
EXTENDED LENGTH, SINGLE FRICTION LATCH, VERTICAL HEADER 6-12 POSITIONS



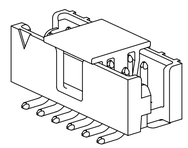
EXTENDED LENGTH, POLARIZATION SLOT, RIGHT ANGLE HEADER 6-12 POSITIONS



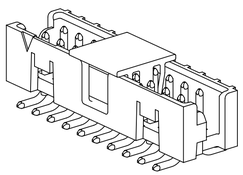
EXTENDED LENGTH, POLARIZATION SLOT, DUAL FRICTION LATCHES, RIGHT ANGLE HEADER 14-50 POSITIONS



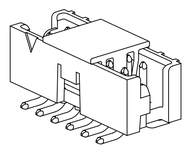
EXTENDED LENGTH, SINGLE FRICTION LATCH, RIGHT ANGLE HEADER 6-12 POSITIONS



EXTENDED LENGTH, POLARIZATION SLOT, SURFACE MOUNT HEADER 6-12 POSITIONS



EXTENDED LENGTH, POLARIZATION SLOT, DUAL FRICTION LATCHES, SURFACE MOUNT HEADER 14-50 POSITIONS



EXTENDED LENGTH, SINGLE FRICTION LATCH, SURFACE MOUNT HEADER 6-12 POSITIONS

ORDERING INFORMATION

TIER 1 - BEST

1591XX-XXXX

TIER
1 = BEST 0.76 μm [30 μin] GOLD

POSITION COUNT
(SEE TABLE)

PART CONFIGURATION
2 = VERTICAL SMT
5 = RIGHT ANGLE THRU HOLE
6 = VERTICAL THRU HOLE

BODY LENGTH
0 = STANDARD LENGTH (MATES TO 158 SERIES)
1 = EXTENDED LENGTH (MATES TO 870 SERIES)

CONTACT TAIL LENGTH
2 = 2.84 mm [.112]
3 = 3.94 mm [.155]

POLARIZATION/LATCHING
0 = POLARIZATION SLOT AND DUAL FRICTION LATCHES (14-50 POSITIONS ONLY)
1 = POLARIZATION SLOT (6-12 POSITIONS ONLY)
2 = SINGLE FRICTION LATCH (6-12 POSITIONS ONLY)

TIER 2 - BETTER

1592XX-XXXX

TIER
2 = BETTER 0.38 μm [15 μin] GOLD

POSITION COUNT
(SEE TABLE)

PART CONFIGURATION
2 = VERTICAL SMT
5 = RIGHT ANGLE THRU HOLE
6 = VERTICAL THRU HOLE

BODY LENGTH
0 = STANDARD LENGTH (MATES TO 158 SERIES)
1 = EXTENDED LENGTH (MATES TO 870 SERIES)

CONTACT TAIL LENGTH
2 = 2.84 mm [.112]
3 = 3.94 mm [.155]

POLARIZATION/LATCHING
0 = POLARIZATION SLOT AND DUAL FRICTION LATCHES (14-50 POSITIONS ONLY)
1 = POLARIZATION SLOT (6-12 POSITIONS ONLY)
2 = SINGLE FRICTION LATCH (6-12 POSITIONS ONLY)

METRIC [ENGLISH]

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	41488	JUN 20,2012 REVISED CURRENT RATING IN PERFORMANCE TABLE	LDS	SAN
C	39876	APR 18,2012 REMOVED 32 POS FROM TABLE ON SHT 5	LDS	SAN
B	34080	MAY 18,2011 ADDED 6.19 DIM ON SHT 2; REVISED & MOVED TABLE TO SHT 5	LDS	SF
A	30741	OCT 28,2010 INITIAL RELEASE	LDS	SF

DESIGN REFERENCE | NEXT ASSEMBLY

DISTRIBUTION CODES

DRFT L. SCHMIDT DATE JUL 29,2010 | MFG | DATE

CHKD | DATE | APPVL S FELDMAN DATE AUG 09,2010

DIVISION | DIVISION CODE

DO NOT SCALE DRAWING | SCALE 4/1

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 1994

MAX SURFACE ROUGHNESS 125 ☐ ALL SURFACES ☒ MARKED ONLY

TOLERANCES EXCEPT AS NOTED
INCHES
.0 ±
.00 ±
.000 ±
.0000 ±
MILLIMETERS
0 ±
.0 ±
.00 ± 0.13
.000 ±
ANGLES ± 1°

© 3M COPYRIGHT 2010
This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.

3M Center St. Paul, MN 55144

TITLE: 3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2359-7 | REV. D

MODEL | DET. LISTS ☐ YES ☒ NO | SHT 4 OF 5

78-5100-2359-7 D
DRAWING NUMBER REVISION

3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]

SHROUDED BOX HEADER							
NUMBER OF POSITIONS	DIM A		DIM B	DIM C		DIM D	
	STANDARD	EXTENDED		STANDARD	EXTENDED		
6	8.35 [.329]	9.52 [.375]	4.00 [.157]	6.83 [.269]	7.99 [.315]	2.84 [.112]	3.94 [.155]
8	10.35 [.407]	11.52 [.453]	6.00 [.236]	8.83 [.347]	9.99 [.393]	2.84 [.112]	3.94 [.155]
10	12.35 [.486]	13.52 [.532]	8.00 [.315]	10.83 [.426]	11.99 [.472]	2.84 [.112]	3.94 [.155]
12	14.35 [.565]	15.52 [.611]	10.00 [.394]	12.83 [.505]	13.99 [.551]	2.84 [.112]	3.94 [.155]
14	16.35 [.644]	17.52 [.690]	12.00 [.472]	14.83 [.584]	15.99 [.630]	2.84 [.112]	3.94 [.155]
16	18.35 [.722]	19.52 [.768]	14.00 [.551]	16.83 [.662]	17.99 [.708]	2.84 [.112]	3.94 [.155]
20	22.35 [.880]	23.52 [.926]	18.00 [.709]	20.83 [.820]	21.99 [.866]	2.84 [.112]	3.94 [.155]
22	24.35 [.959]	25.52 [1.005]	20.00 [.787]	22.83 [.899]	23.99 [.945]	2.84 [.112]	3.94 [.155]
24	26.35 [1.037]	27.52 [1.083]	22.00 [.866]	24.83 [.977]	25.99 [1.023]	2.84 [.112]	3.94 [.155]
26	28.35 [1.116]	29.52 [1.162]	24.00 [.945]	26.83 [1.056]	27.99 [1.102]	2.84 [.112]	3.94 [.155]
30	32.35 [1.274]	33.52 [1.320]	28.00 [1.102]	30.83 [1.214]	31.99 [1.260]	2.84 [.112]	3.94 [.155]
34	36.35 [1.431]	37.52 [1.477]	32.00 [1.260]	34.83 [1.371]	35.99 [1.417]	2.84 [.112]	3.94 [.155]
40	42.35 [1.667]	43.52 [1.713]	38.00 [1.496]	40.83 [1.607]	41.99 [1.653]	2.84 [.112]	3.94 [.155]
44	46.35 [1.825]	47.52 [1.871]	42.00 [1.654]	44.83 [1.765]	45.99 [1.811]	2.84 [.112]	3.94 [.155]
50	52.35 [2.061]	53.52 [2.107]	48.00 [1.890]	50.83 [2.001]	51.99 [2.047]	2.84 [.112]	3.94 [.155]

METRIC [ENGLISH]

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	41488	JUN 20,2012 REVISED CURRENT RATING IN PERFORMANCE TABLE	LDS	SAN
C	39876	APR 18,2012 REMOVED 32 POS FROM TABLE ON SHT 5	LDS	SAN
B	34080	MAY 18,2011 ADDED 6.19 DIM ON SHT 2; REVISED & MOVED TABLE TO SHT 5	LDS	SF
A	30741	OCT 28,2010 INITIAL RELEASE	LDS	SF

DESIGN REFERENCE | NEXT ASSEMBLY

DISTRIBUTION CODES

DIVISION | DIVISION CODE

DRFT L. SCHMIDT — DATE JUL 29,2010 — MFG — DATE

CHKD — DATE — APPVL S FELDMAN — DATE AUG 09,2010

DO NOT SCALE DRAWING | SCALE 1/1

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 1994

MAX SURFACE ROUGHNESS 125 ☐ ALL SURFACES ☒ MARKED ONLY

TOLERANCES EXCEPT AS NOTED

INCHES
.0 ±
.00 ±
.000 ±
.0000 ±

MILLIMETERS
0 ±
.0 ±
.00 ±0.13
.000 ±

ANGLES ±1°

© 3M COPYRIGHT 2010
This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.

3M Center, St. Paul, MN 55144

TITLE: 3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2359-7 | REV. D

MODEL | DET. LISTS ☐ YES ☒ NO | SHT 5 OF 5

78-5100-2359-7 DRAWING NUMBER | D REVISION

LifeElectronics
Живое партнерство

ООО «ЛайфЭлектроникс» **“LifeElectronics” LLC**

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- *Конкурентоспособные цены и скидки постоянным клиентам.*
- *Специальные условия для постоянных клиентов.*
- *Подбор аналогов.*
- *Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.*

- *Приемлемые сроки поставки, возможна ускоренная поставка.*
- *Доставку товара в любую точку России и стран СНГ.*
- *Комплексную поставку.*
- *Работу по проектам и поставку образцов.*
- *Формирование склада под заказчика.*

- *Сертификаты соответствия на поставляемую продукцию (по желанию клиента).*
- *Тестирование поставляемой продукции.*
- *Поставку компонентов, требующих военную и космическую приемку.*
- *Входной контроль качества.*
- *Наличие сертификата ISO.*

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- *Регистрацию проекта у производителя компонентов.*
- *Техническую поддержку проекта.*
- *Защиту от снятия компонента с производства.*
- *Оценку стоимости проекта по компонентам.*
- *Изготовление тестовой платы монтаж и пусконаладочные работы.*

Тел: +7 (812) 336 43 04 (многоканальный)
Email: org@lifeelectronics.ru

www.lifeelectronics.ru