

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

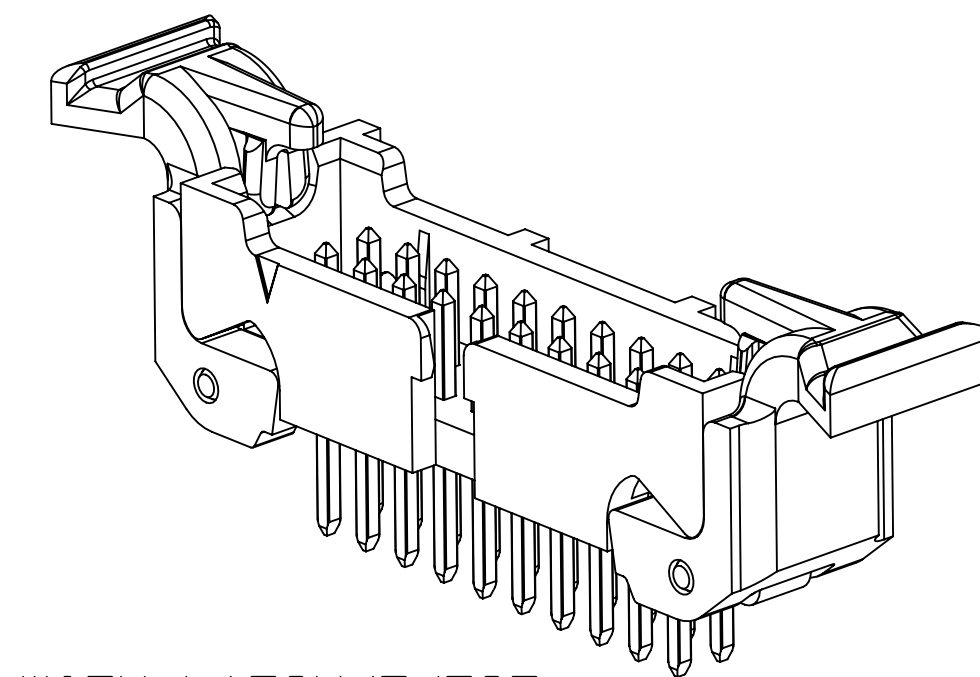
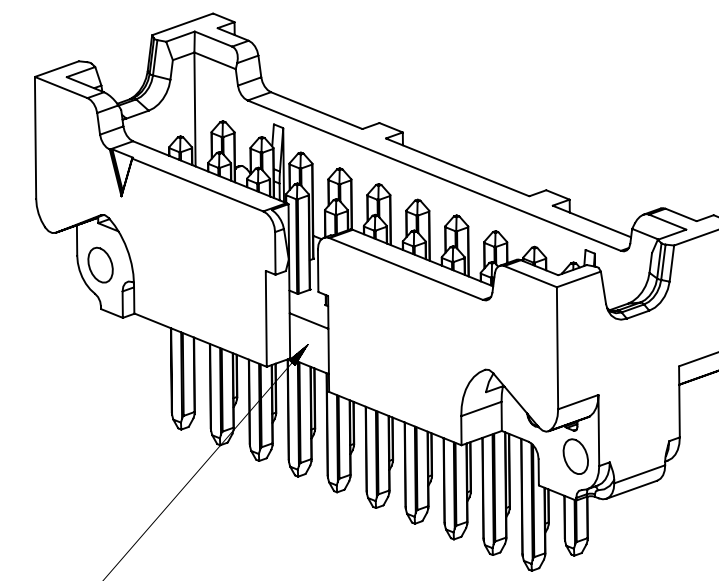
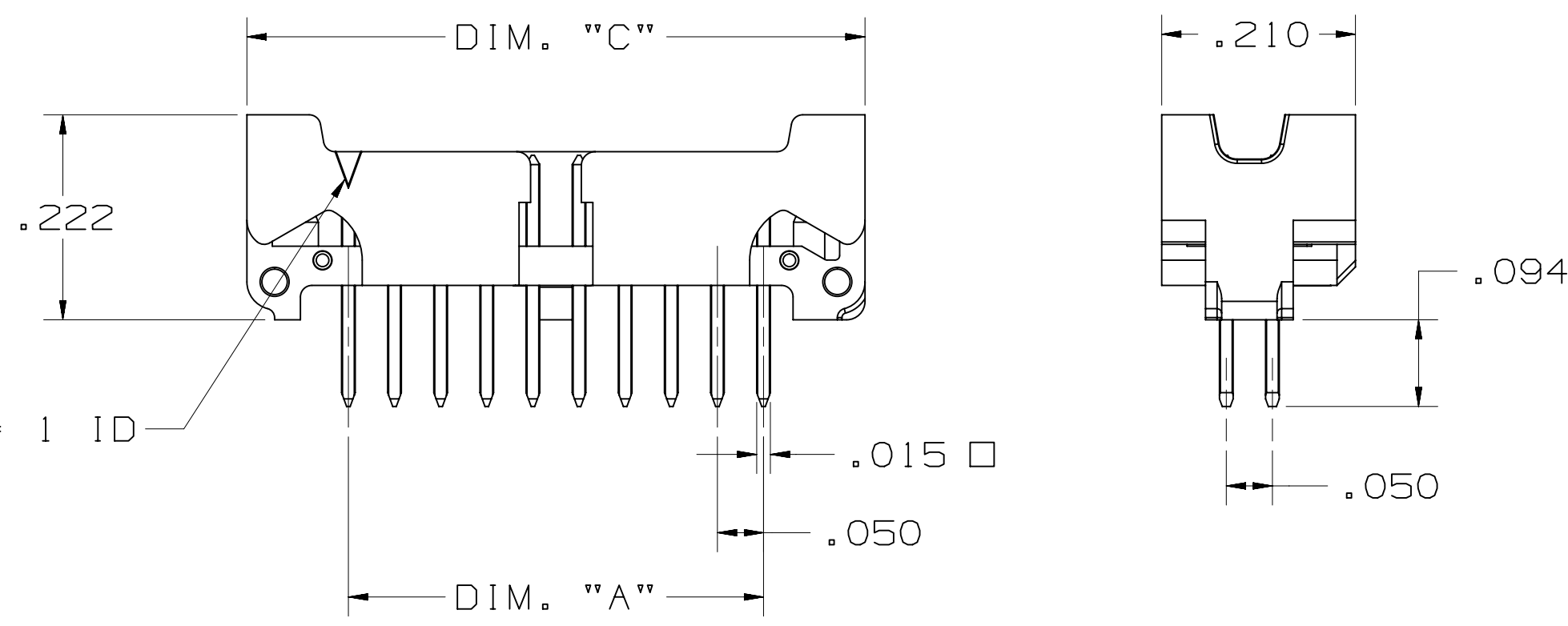


TABLE 1: VERTICAL THRU

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

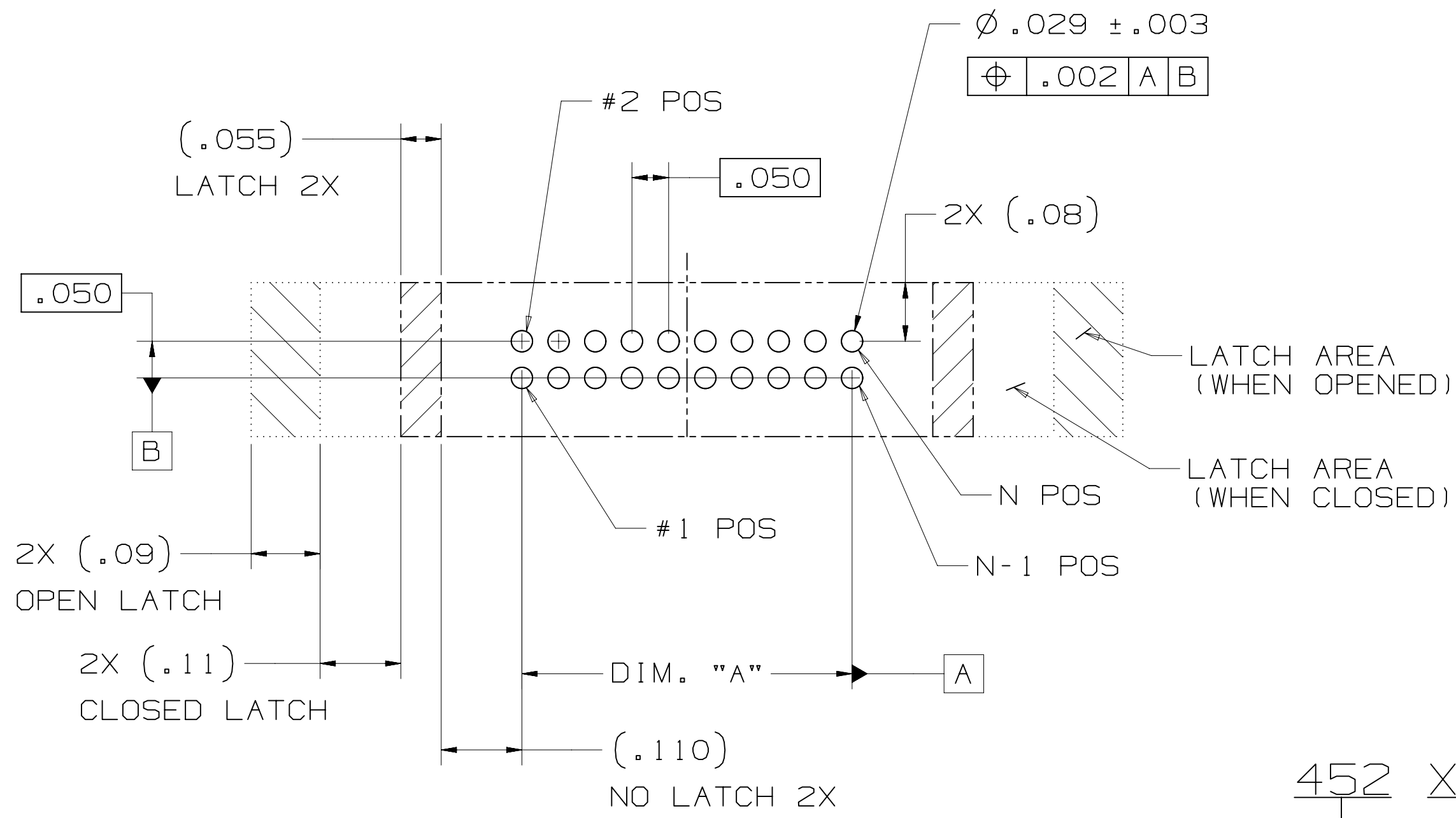
POLARIZATION AND FRICTION LATCHING POSITIONS 8-30 ONLY

WITH LATCH/EJECT

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<sub>ac</sub>  
INSULATION RESISTANCE: > 1 x 10<sup>9</sup> 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



RECOMMENDED BOARD LAYOUT

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>

3M IS A TRADEMARK OF 3M COMPANY.  
FOR TECHNICAL, SALES OR ORDERING  
INFORMATION CALL 800-225-5373

UL FILE NO: E68080

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

THIRD ANGLE PROJECTION

MAX SURFACE ROUGHNESS

MARKED ONLY

SCALE 6-1

TOLERANCES EXCEPT AS NOTED

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

MILLIMETERS: 0, .0 ±.1, .00 ±.01, .00 ±.01

INTERPRET PER ASME Y14.5 - 2009

3M

© 3M COPYRIGHT 2014

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

CAGE NUMBER D78-5100-2437-1

REV. F

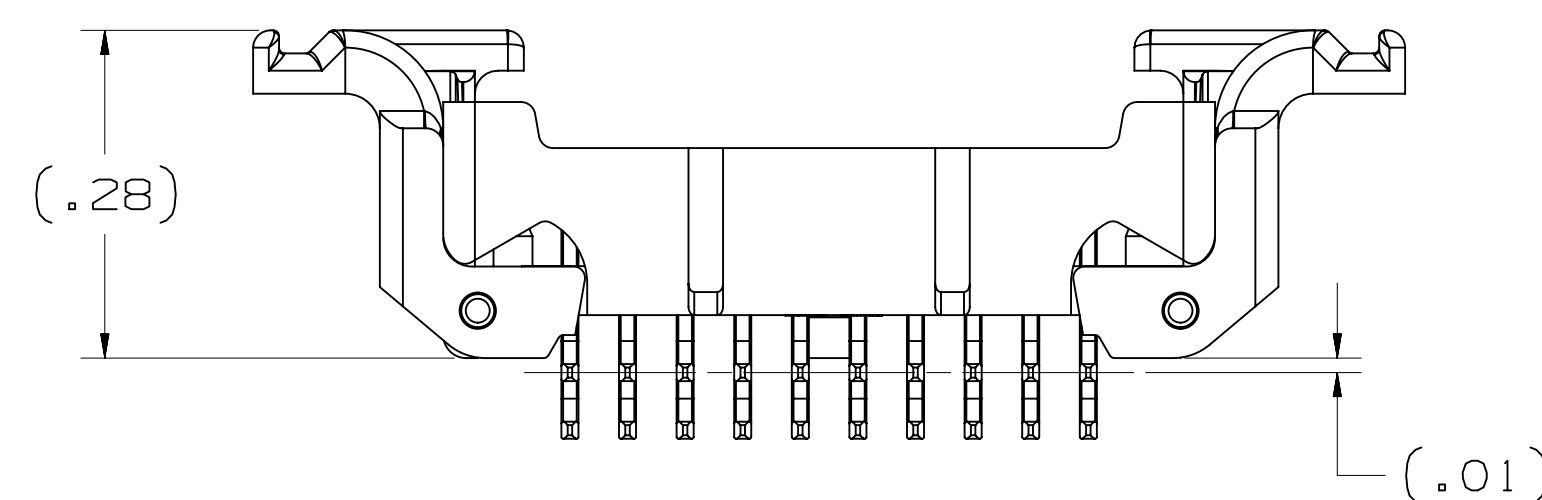
MODEL

LISTS YES NO SHT 1 OF 4

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 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 ±

.000 ±

MARKED ONLY

ANGLES

REV. DATE

ARM NOV 29, 2012 PRC

SAN NOV 29, 2012 SAN

ISSUE DATE AND DESCRIPTION

NOV 29, 2012 PRC

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2012 SAN

NOV 29, 2

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

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: Interconnect Solutions

SCALE: 6/1

TOLERANCES EXCEPT AS NOTED

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

MILLIMETERS: 0 ± .01, .00 ± .010, .000 ± .0050

INTERPRET PER ASME Y14.5 - 2009

MAX SURFACE ROUGHNESS: 0.40 ± .010, 0.200 ± .010

MARKED ONLY

F	56988	SEP 24, 2014	JNC	SN
E	54514	JUN 19, 2014	SJS	SAN
D	51884	JAN 08, 2014	SJS	SAN
C	50290	OCT 08, 2013	JNC	SN
B	48635	JUL 12, 2013	JNC	SN
A	46797	MAR 25, 2013	JNC	SAN

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

© 3M COPYRIGHT 2014  
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

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

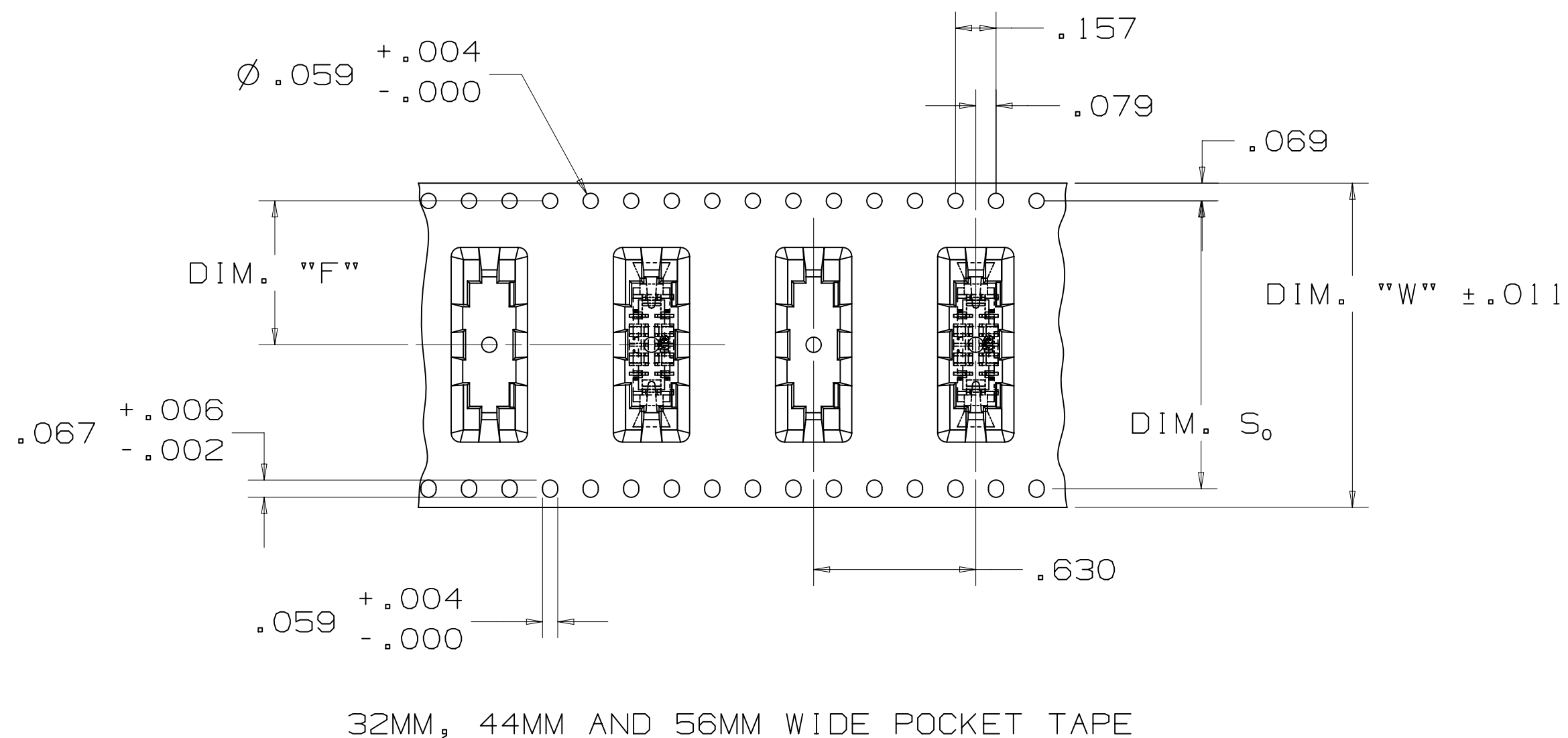
3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH  
LATCH AND EJECT, 452 SERIES



TABLE 2  
TAPE AND REEL PACKAGING FOR SURFACEMOUNT HEADERS

POS	LATCHES	DIM. "F"	DIM. K <sub>0</sub>	DIM. S <sub>0</sub>	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.



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 .00 ±.02 .000 ±.010 .0000 ±.0050
INTERPRET PER ASME Y14.5 - 2009	MILLIMETERS 0 ± .0 ± .00 ± ±.00 ±
MAX SURFACE ROUGHNESS	MARKED ONLY

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

© 3M COPYRIGHT 2014  
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  
BOARDMOUNT HEADER,  
.05 X .05 PITCH, L/E,  
452 SERIES

CAGE NUMBER  
D 78-5100-2437-1

REV. F

MODEL  
LISTS  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 «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).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А