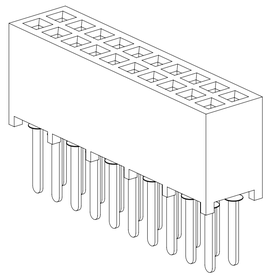
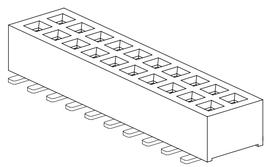
3M™ BOARDMOUNT SOCKET, .050" [1.27mm], 9X9 SERIES

DUAL ROW, STRAIGHT AND SURFACE MOUNT, PLATED THROUGH HOLE



909 SERIES
STRAIGHT
VERSION



919 SERIES
SURFACE MOUNT
VERSION

[2] PHYSICAL:

INSULATOR:	
MATERIAL:	GLASS FILLED POLYESTER (LCP)
FLAMMABILITY:	UL94V-0
COLOR:	BLACK
CONTACT:	
MATERIAL:	COPPER ALLOY
PLATING:	
UNDER PLATING:	1.27μm [50μ"] AVG. NICKEL-OVERALL
WIPING AREA:	GOLD FLASH
909 SERIES:	
SOLDER TAILS:	5.08μm [200μ"] MATTE TIN
919 SERIES:	
SOLDER TAILS:	GOLD FLASH

[2] ELECTRICAL:

CURRENT RATING:	1A
CONTACT RESISTANCE:	≤20mΩ
INSULATION RESISTANCE:	≥1000MΩ
WITHSTANDING VOLTAGE:	500V AC, 1mA, 60s

[2] MECHANICAL:

BOARDMOUNT STRAIGHT SOCKET:	
RETENTION FORCE:	≥3.43N/PIN
INSERTION FORCE:	≤1.8N/PIN
EXTRACTION FORCE:	≥0.2N/PIN
MECHANICAL LIFE:	50 CYCLES
SURFACE MOUNT SOCKET:	
INSERTION FORCE:	≤2N/PIN
EXTRACTION FORCE:	≥0.3N/PIN
MECHANICAL LIFE:	50 CYCLES

[2] ENVIRONMENTAL:

BOARDMOUNT STRAIGHT SOCKET:	
WORKING TEMP:	-40°C TO +105°C
HUMIDITY:	≤93% AT 40°C
RESISTANCE TO SOLDERING HEAT:	260°C, 30s
SURFACE MOUNT SOCKET:	
WORKING TEMP:	-55°C TO +125°C
HUMIDITY:	≤93% AT 40°C
RESISTANCE TO SOLDERING HEAT:	260°C, 10s

NOTES

1. REGULATORY INFORMATION: VISIT 3M.com/regs
2. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
3. FOR PACKAGING SPECIFICATION, TAPE OPTION #1 OR OPTION #2 WILL BE WOUND ON REEL. IT DEPENDS ON THE CONTACT QTY. OF THE SOCKET.

DIMENSIONS: MM [INCHES]
[INCHES] IS FOR REF. ONLY

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
B	114892	MAR 19,2024 REVISE TAIL PLATING	JNC	EST
A	110471	MAY 25,2023 PRODUCTION RELEASE	JNC	EST

DESIGN REFERENCE | NEXT ASSEMBLY
ACCESS CODES

DRFT	CASTIGLIONE	DATE	MAR 02,2023
CHKD	S. OWEN	DATE	APR 11,2023
MFG ENG	SENG TEH	DATE	APR 11,2023
APPV	E. CHEN	DATE	MAR 15,2023

DIVISION
DIVISION CODE: EMSD

DO NOT SCALE DRAWING | SCALE 8:1

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2018

MAX SURFACE ROUGHNESS: √ ☐ ALL SURFACES ☐ MARKED ONLY

TOLERANCES EXCEPT AS NOTED

INCHES	
.0	±
.00	±
.000	±
.0000	±

MILLIMETERS	
0	±2
.0	±0.3
.00	±0.13
.000	±0.005

ANGLES ±

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TITLE: BOARDMOUNT SOCKET, 1.27MM [.050"], 9X9 SERIES

CAGE NUMBER | SIZE: D | DRAWING NO.: 78-5100-2780-4 | REV.: B

MODEL: 9X9XX | DET. LISTS ☐ YES ☒ NO | SHT 1 OF 4

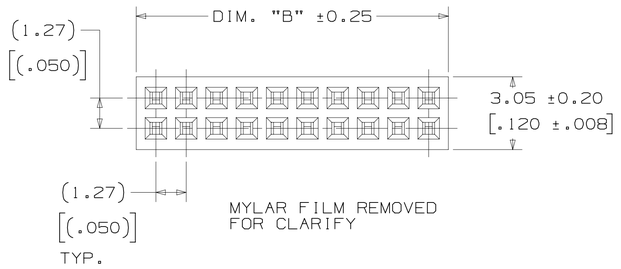
78-5100-2780-4 DRAWING NUMBER | B REVISION

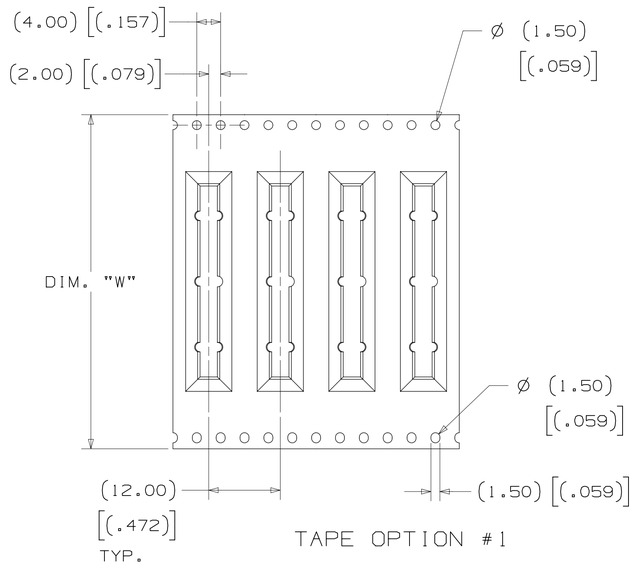
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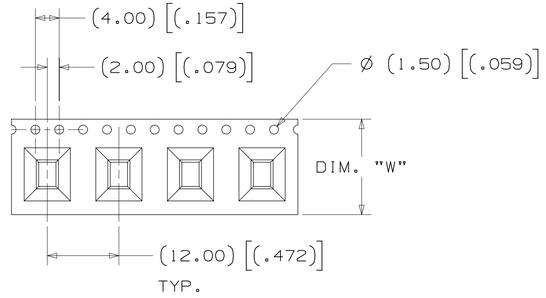
3M™ BOARDMOUNT SOCKET, .050" [1.27mm], 9X9 SERIES

DUAL ROW, STRAIGHT AND SURFACE MOUNT, PLATED THROUGH HOLE

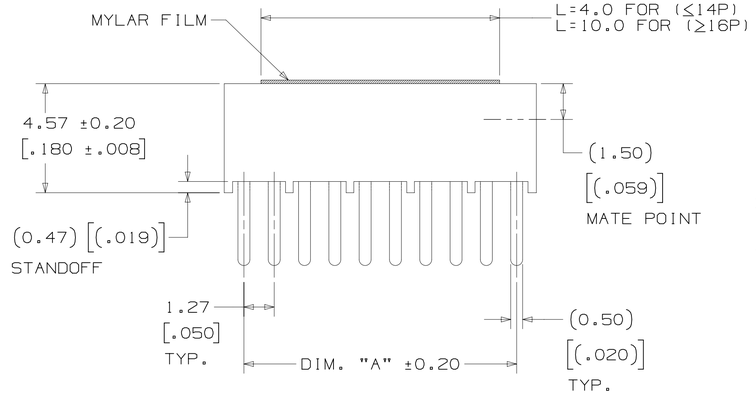




TAPE OPTION #1



TAPE OPTION #2



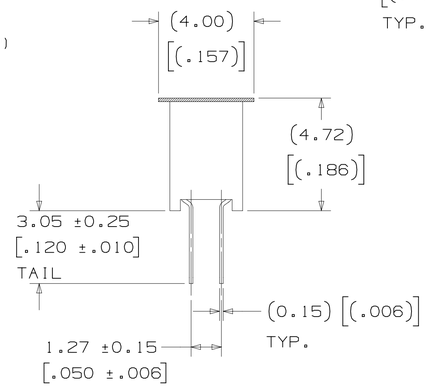
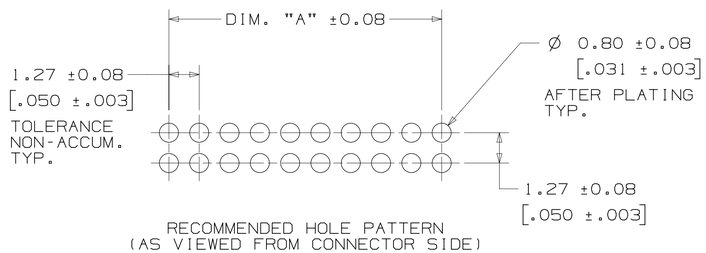


TABLE 1				
CONTACT QTY.	DIM. "A"	DIM. "B"	DIM. "W"	TAPE OPTION SEE NOTE 3
06	2.54 [.100]	4.19 [.165]	16mm	2
08	3.81 [.150]	5.46 [.215]	24mm	2
10	5.08 [2.00]	6.73 [.265]	24mm	2
16	8.89 [.350]	10.54 [.415]	24mm	2
20	11.43 [.450]	13.08 [.515]	32mm	1
26	15.24 [.600]	16.89 [.665]	32mm	1
30	17.78 [.700]	19.43 [.765]	44mm	1
40	24.13 [.950]	25.78 [1.015]	44mm	1
50	30.48 [1.200]	32.13 [1.265]	56mm	1
80	49.53 [1.950]	51.18 [2.015]	72mm	1



RECOMMENDED HOLE PATTERN
(AS VIEWED FROM CONNECTOR SIDE)

ORDERING INFORMATION
STRAIGHT SOCKET

909XX-0000

- BMT STRAIGHT SOCKET
- NUMBER OF CONTACTS (SEE TABLE 1)

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REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
B	114892	MAR 19,2024 REVISE TAIL PLATING	JNC	EST
A	110471	MAY 25,2023 PRODUCTION RELEASE	JNC	EST

DESIGN REFERENCE | NEXT ASSEMBLY | ACCESS CODES

DRFT: CASTIGLIONE — DATE: MAR 02,2023 — MFG ENG: SENG TEH — DATE: APR 11,2023
CHKD: S. OWEN — DATE: APR 11,2023 — APPVL: E. CHEN — DATE: MAR 15,2023

DIVISION: EMSD

DO NOT SCALE DRAWING | SCALE: 8/1

TOLERANCES EXCEPT AS NOTED
INCHES: .0 ± .00 ± .000 ± .0000 ±
MILLIMETERS: 0 ±2 .0 ±0.3 .00 ±0.13 .000 ±0.005
ANGLES ±

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2018

MAX SURFACE ROUGHNESS: √ ☐ ALL SURFACES; √ ☐ MARKED ONLY

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TITLE: BOARDMOUNT SOCKET, 1.27MM [.050"], 9X9 SERIES

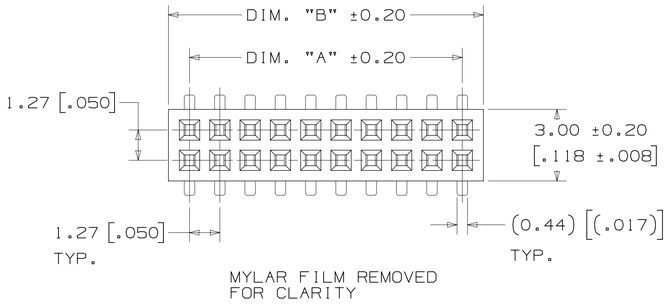
CAGE NUMBER | SIZE: D | DRAWING NO.: 78-5100-2780-4 | REV.: B

MODEL: 9X9XX | DET. LISTS ☐ YES ☒ NO | SHT 2 OF 4

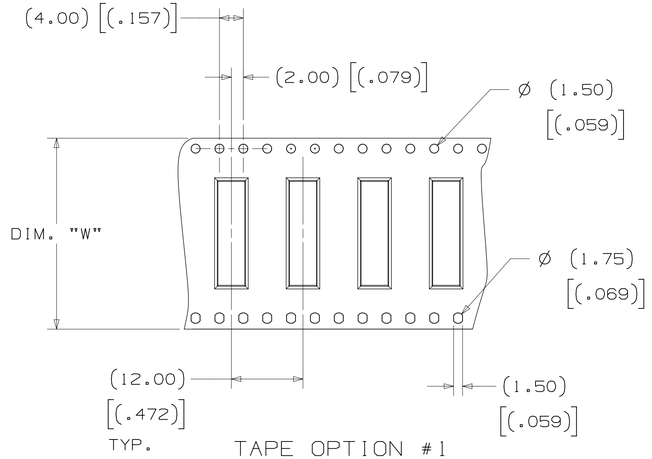
78-5100-2780-4 DRAWING NUMBER | B REVISION

3M™ BOARDMOUNT SOCKET, .050" [1.27mm], 9X9 SERIES

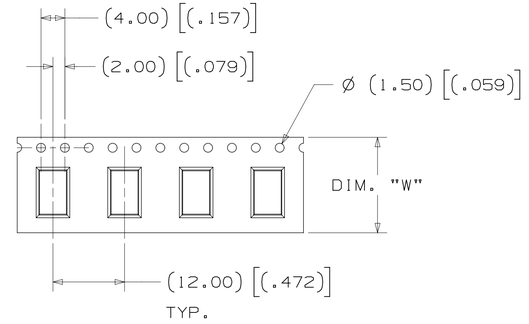
DUAL ROW, STRAIGHT AND SURFACE MOUNT, PLATED THROUGH HOLE



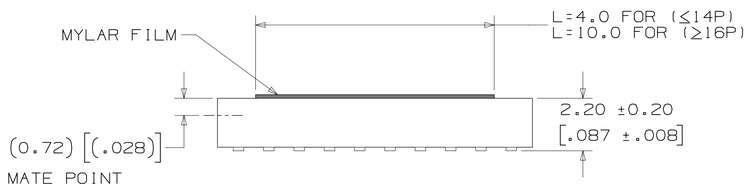
MYLAR FILM REMOVED
FOR CLARITY



TAPE OPTION #1



TAPE OPTION #2



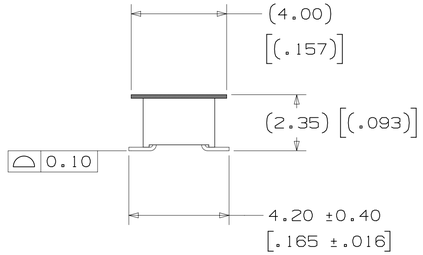
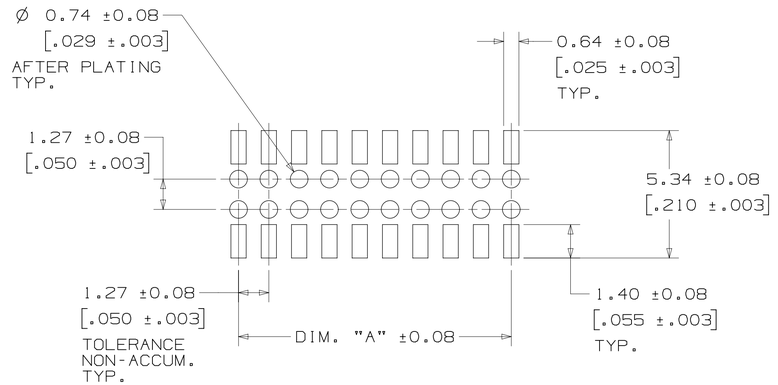


TABLE 2				
CONTACT QTY.	DIM. "A"	DIM. "B"	DIM. "W"	TAPE OPTION SEE NOTE 3
06	2.54 [.100]	4.31 [.170]	16MM	2
08	3.81 [.150]	5.58 [.220]	16MM	2
10	5.08 [2.00]	6.85 [.270]	16MM	2
16	8.89 [.350]	10.66 [.420]	24MM	2
20	11.43 [.450]	13.20 [.520]	24MM	2
26	15.24 [.600]	17.01 [.670]	32MM	1
30	17.78 [.700]	19.55 [.770]	32MM	1
40	24.13 [.950]	25.90 [1.020]	44MM	1
50	30.48 [1.200]	32.25 [1.270]	44MM	1



RECOMMENDED HOLE PATTERN
(AS VIEWED FROM CONNECTOR SIDE)

ORDERING INFORMATION
SURFACE MOUNT SOCKET

919XX-0000

- 919XX- : BMT SURFACE MOUNT SOCKET
- XX : NUMBER OF CONTACTS (SEE TABLE 2)
- -0000

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REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
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DIVISION: EMSD

DO NOT SCALE DRAWING | SCALE 8/1

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2018

MAT'L SURFACE ROUGHNESS: ☐ ALL SURFACES ☐ MARKED ONLY

TOLERANCES EXCEPT AS NOTED
INCHES: .0 ± .00 ± .000 ± .0000 ±
MILLIMETERS: 0 ±2 .0 ±0.3 .00 ±0.13 .000 ±0.005
ANGLES ±

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TITLE: BOARDMOUNT SOCKET, 1.27MM [.050"], 9X9 SERIES

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2780-4 | REV. B

MODEL: 9X9XX | DET. LISTS ☐ YES ☒ NO | SHT 3 OF 4

78-5100-2780-4 (DRAWING NUMBER) | B (REVISION)

3M™ BOARDMOUNT SOCKET, .050" [1.27mm], 9X9 SERIES

DUAL ROW, STRAIGHT AND SURFACE MOUNT, PLATED THROUGH HOLE

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CHKD: S. OWEN — DATE: APR 11,2023 — APPVL: E. CHEN — DATE: MAR 15,2023

DIVISION: EMSD — DIVISION CODE

DO NOT SCALE DRAWING | SCALE 1/1

TOLERANCES EXCEPT AS NOTED
INCHES: .0 ± / .00 ± / .000 ± / .0000 ±
MILLIMETERS: 0 ±2 / .0 ±0.3 / .00 ±0.13 / .000 ±0.005
ANGLES ±

THIRD ANGLE PROJECTION
INTERPRET PER ASME Y14.5 - 2018
MAX SURFACE ROUGHNESS: ☐ ALL SURFACES ☐ MARKED ONLY

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TITLE: BOARDMOUNT SOCKET, 1.27MM [.050"], 9X9 SERIES

CAGE NUMBER | SIZE: D | DRAWING NO.: 78-5100-2780-4 | REV.: B

MODEL: 9X9XX | DET. LISTS ☐ YES ☒ NO | SHT 4 OF 4

78-5100-2780-4 (DRAWING NUMBER) B (REVISION)

Unikeyic Electronics

Global Electronic Components Distributor

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