

3M™ Four-Wall Header

.100" x .100" Low Profile, SMT Straight, Straight and Rt Angle Through-Hole

D2500 Series



- Low profile, space saving design
- Center slot polarization designed to prevent misinsertions and reduce insertion time
- Dual slot polarization means broader compatibility with competitive polarization designs (not 6, 8 or 10 pos.)
- Optional retainer clip for locking sockets in place and increasing connection reliability in vibrationprone environments
- High temperature insulator suitable for “no lead” soldering operations
- High temperature insulator in through-hole version suitable for “paste in hole” reflow soldering
- Exposed solder tails (on right angle version) are designed to provide ease of cleaning and help reduce repair costs
- Straight surface mount version available
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3Mconnectors.com for compliance information

Date Modified: June 13, 2012

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Sheet 1 of 5

Physical

Insulator

Material: High Temp Glass Filled Polyester (PCT)
Flammability: UL 94V-0
Color: Black (PCT)
Contact Material: Brass

Plating

Underplating: 50 -100 μ " [1.25 μ m] Ni
Wiping Area: 10 μ " [0.25 μ m] Gold
Solder Tails: 40 - 120 μ " [1-3 μ m] Matte Tin

Marking: 3M Logo, Part Identification Number and Orientation Triangle

Electrical

Current Rating: 5.00 A, 1 Contact Powered
3.00 A, 6 Contacts Powered
1.75 A, All Contacts Powered
Rating Conditions: EIA-364-070 Method 2, 30°C maximum temperature rise, 20% derated. Reference appropriate 3M Product Specification for detailed current derating curves.

Insulation Resistance: $>1 \times 10^9 \Omega$ at 500 V_{DC}

Withstanding Voltage: 1,000 V_{RMS} at Sea Level

Environmental

Temperature Rating: -55°C to +105°C

Process Rating: 260°C single pass (profile per J-STD-020C)

Moisture Sensitivity Level: 1 (per J-STD-020C)

UL File No.: E68080



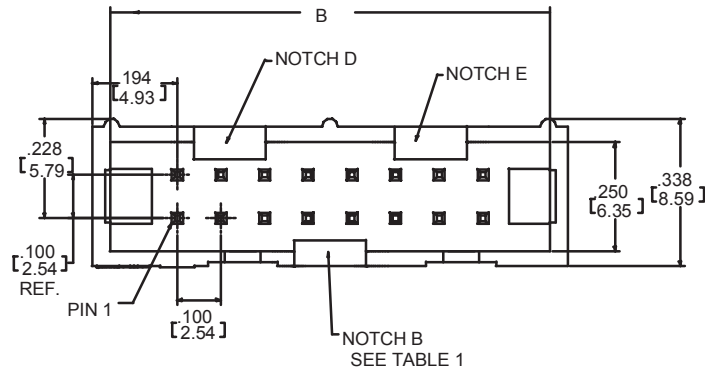
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3M™ Four-Wall Header

.100" x .100" Low Profile, Straight Through-Hole

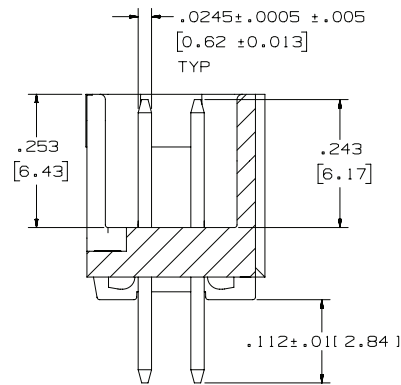
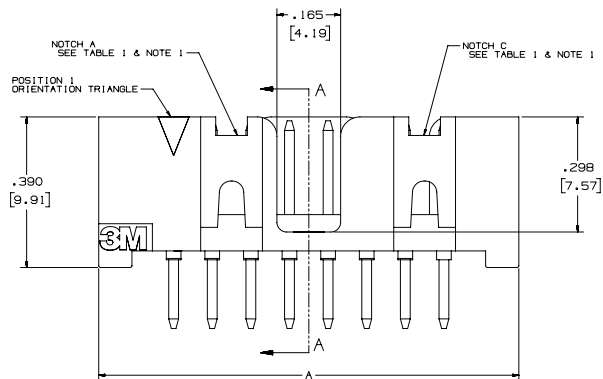
D2500 Series



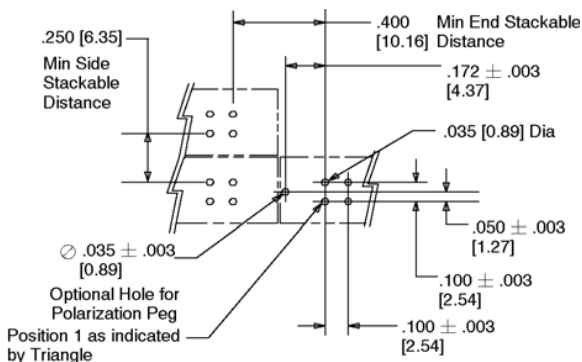
Inch (mm)

Tolerance Unless Noted			
	.0	.00	.000
Inch	± .1	±	± .005

[] Dimensions for Reference only



SECTION A - A



Recommended P.C. Board Hole Pattern
(Shown for mounting side of board.)

Table 1				
Pin Qty	Dimensions			Polarizing Notches
	A	B		
6	0.588 (14.94)	0.508 (12.90)		B
8	0.688 (17.48)	0.608 (15.44)		B
10	0.788 (20.02)	0.708 (17.98)		BC
14	0.988 (25.10)	0.908 (22.06)		BCDE
16	1.088 (27.64)	1.008 (25.60)		ABCDE
20	1.288 (32.72)	1.208 (30.68)		ABCDE
24	1.488 (37.80)	1.408 (35.76)		ABCDE
26	1.588 (40.34)	1.508 (38.30)		ABCDE
30	1.788 (45.42)	1.708 (43.38)		ABCDE
34	1.988 (50.50)	1.908 (48.46)		ABCDE
36	2.088 (53.04)	2.008 (51.00)		ABCDE
40	2.288 (58.12)	2.208 (56.08)		ABCDE
50	2.788 (70.82)	2.708 (68.78)		ABCDE
60	3.288 (83.52)	3.208 (81.48)		ABCDE
64	3.488 (88.60)	3.408 (86.56)		ABCDE

Ordering Information

D25XX-6002-AR

Plating:
AR = 10 μ" [0.25 μm] Gold (RIA E1 & C1 apply)

Solder Tail
02 = for .062 [1.57] thick board
Pin Quantity:
(See Table 1)

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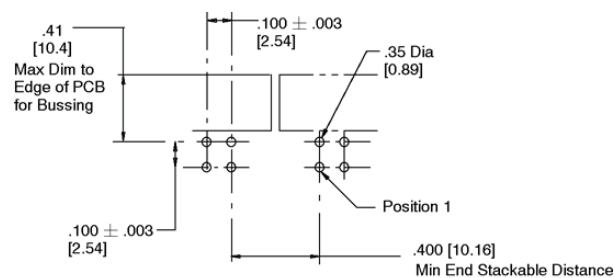
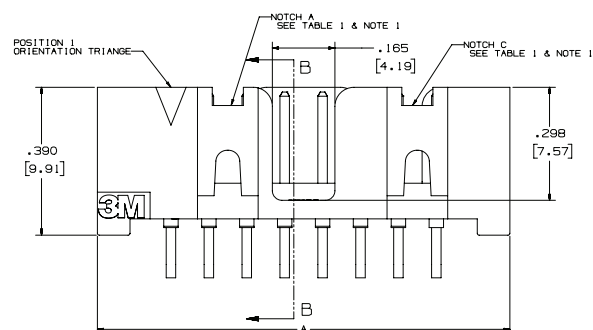
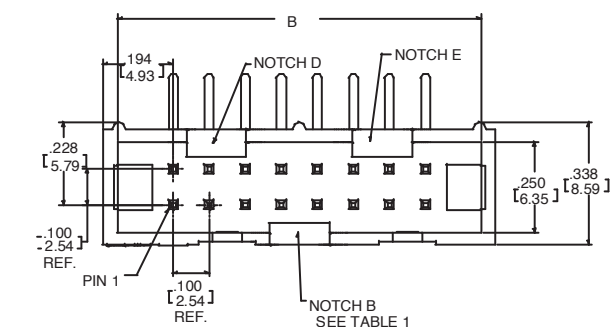
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3M™ Four-Wall Header

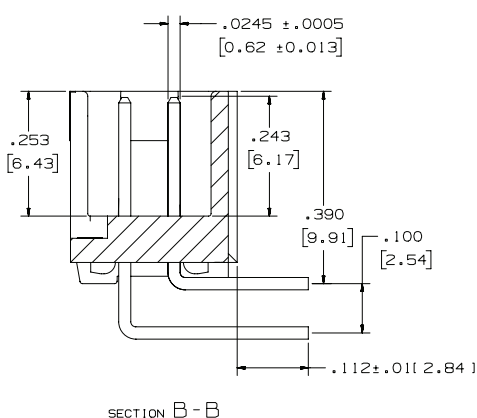
.100" x .100" Low Profile, Right Angle Through-Hole

D2500 Series



Recommended Mounting Hole Pattern

Table 1				
Pin Qty	Dimensions		Polarizing Notches	
	A	B		
6	0.588 (14.94)	0.508 (12.90)	B	
8	0.688 (17.48)	0.608 (15.44)	B	
10	.788 (20.02)	.708 (17.98)	BC	
14	.988 (25.10)	.908 (22.06)	BCDE	
16	1.088 (27.64)	1.008 (25.60)	ABCDE	
20	1.288 (32.72)	1.208 (30.68)	ABCDE	
24	1.488 (37.80)	1.408 (35.76)	ABCDE	
26	1.588 (40.34)	1.508 (38.30)	ABCDE	
30	1.788 (45.42)	1.708 (43.38)	ABCDE	
34	1.988 (50.50)	1.908 (48.46)	ABCDE	
36	2.088 (53.04)	2.008 (51.00)	ABCDE	
40	2.288 (58.12)	2.208 (56.08)	ABCDE	
50	2.788 (70.82)	2.708 (68.78)	ABCDE	
60	3.288 (83.52)	3.208 (81.48)	ABCDE	
64	3.488 (88.60)	3.408 (86.56)	ABCDE	



Tolerance Unless Noted			
	.0	.00	.000
Inch	± .1	±	± .005

[] Dimensions for Reference only



Notes:

- Notches A & C will accommodate 3M Polarizing Keys (3M Part N3518).
- Contacts tails .0245 [0.622] wire with .0075 [0.191] corner radii & .028 [0.71] diagonal.

Ordering Information

D25XX-5002-AR

Plating:
AR = 10 μm [0.25 μm] Gold (RIA E1 & C1 apply)

Pin Quantity:
(See Table 1)

Solder Tail
02 = for .062 [1.57] thick board

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Sheet 3 of 5



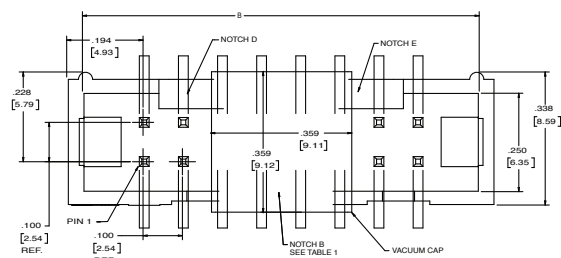
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3M™ Four-Wall Header

.100" x .100" Low Profile, Surface Mount Straight

D2500 Series



Inch [mm]			
Tolerance Unless Noted			
	.0		.000
Inch	±.1	±.01	±.005

[] Dimensions for Reference only

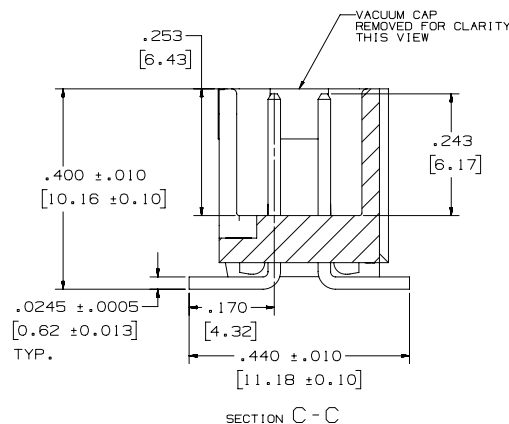
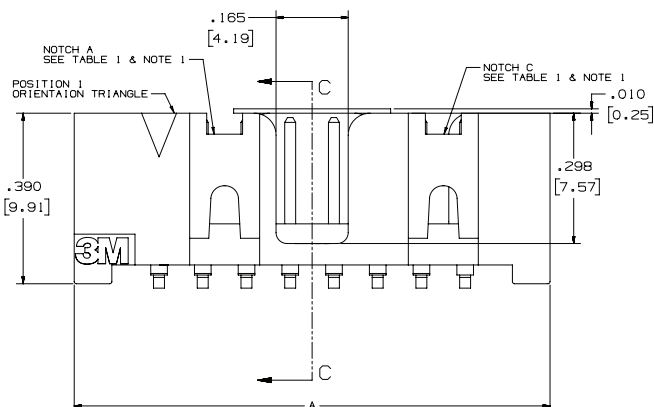
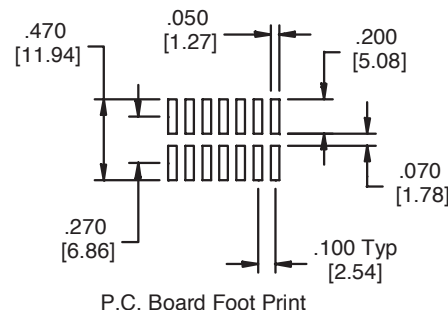


Table 1

Pin Qty	Dimensions		Polarizing Notches	Tape and Reel Pkg Code
	A	B		
6	0.588 (14.94)	0.508 (12.90)	B	WD (44 mm)
8	0.688 (17.48)	0.608 (15.44)	B	WD (44 mm)
10	.788 (20.02)	.708 (17.98)	BC	WD (44 mm)
14	.988 (25.10)	.908 (22.06)	BCDE	WD (44 mm)
16	1.088 (27.64)	1.008 (25.60)	ABCDE	WD (44 mm)
20	1.288 (32.72)	1.208 (30.68)	ABCDE	WE (56 mm)
24	1.488 (37.80)	1.408 (35.76)	ABCDE	WE (56 mm)
26	1.588 (40.34)	1.508 (38.30)	ABCDE	WE (56 mm)
30	1.788 (45.42)	1.708 (43.38)	ABCDE	WF (72 mm)
34	1.988 (50.50)	1.908 (48.46)	ABCDE	WF (72 mm)
36	2.088 (53.04)	2.008 (51.00)	ABCDE	WG (88 mm)
40	2.288 (58.12)	2.208 (56.08)	ABCDE	WG (88 mm)
50	2.788 (70.82)	2.708 (68.78)	ABCDE	WG (88 mm)
60	3.288 (83.52)	3.208 (81.48)	ABCDE	WH (120 mm)
64	3.488 (88.60)	3.408 (86.56)	ABCDE	WH (120 mm)

Notes:

- Notches A & C will accommodate 3M Polarizing Key N3518.
- Vacuum cap will be centered on connectors with odd # of pins/row. It will be offset away from pin 1 on connectors having an even # of pins per row (shown).
- Coplanarity .004 for less than 30 position, .006 for 30 and above.



Ordering Information

D25XX-6V0C-AR-XX

Packaging Options:
WX = tape & reel packaging (see table 1)

Plating:
AR = 10 μ" [0.25 μm] Gold (RIA E1 & C1)

Pin Quantity:
(See Table)

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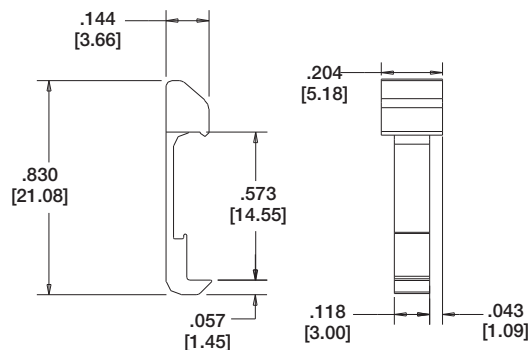
3M™ Four-Wall Header

.100" x .100" Low Profile, Accessories

2500 Series

Connector Pin Qty	Dimension A
6	N/A
8	N/A
10	0.81 (20.6)
14	1.02 (25.9)
16	1.12 (28.4)
20	1.32 (33.5)
24	1.52 (38.7)
26	1.63 (41.4)
30	1.83 (46.4)
34	2.03 (51.6)
36	N/A
40	2.33 (59.2)
50	2.83 (71.9)
60	3.33 (84.6)
64	3.53 (89.7)

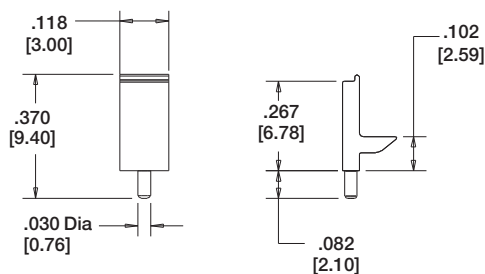
Part Number	Material	Color
3505-33B	Nylon	Black



Long Snap In Latch

Note: Latches not compatible with reflow soldering. For reflow soldering, attach latches after soldering.

Part Number	Material	Color
3201-3	PCT	Black

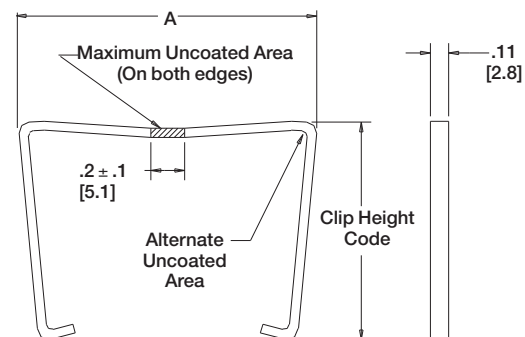


Polarizing Post

3505-8XXX

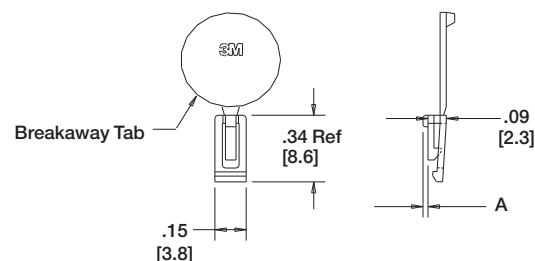
Connector Pin Count:
(See Table)

Clip Height Code
0 = .31 [7.9] for Sockets
W/O Strain Relief
1 = .53 [13.5] for Sockets
with Strain Relief



Short/Long Socket Retainer Clip

Part Number	Material	Color	Dim A
N3518	LCP	Black	0.02



Note: 3M™ Scotch-Weld™ Epoxy Adhesive 2216 B/A

Polarizing Keys

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3M Electronics Solutions Division

6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
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