

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: December 15, 2011

TS-2244-F
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

3M

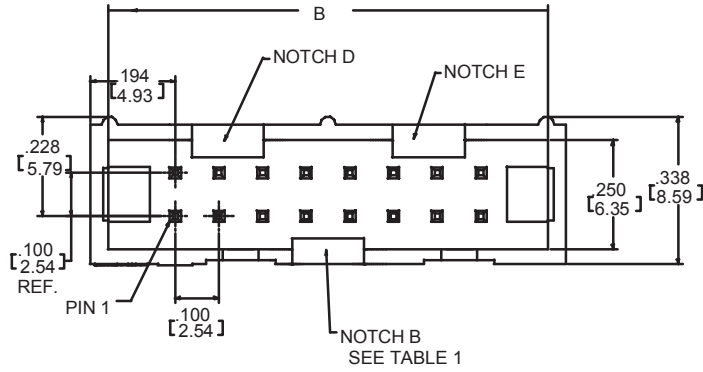
Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnectors.com>

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

3M™ Four-Wall Header

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

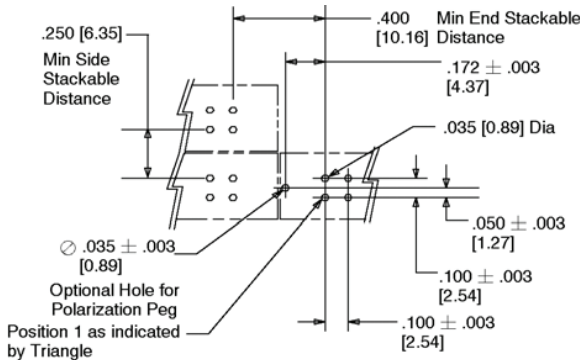
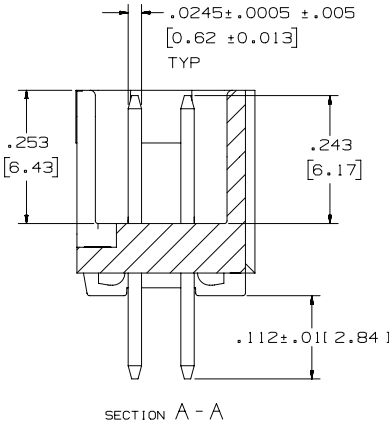
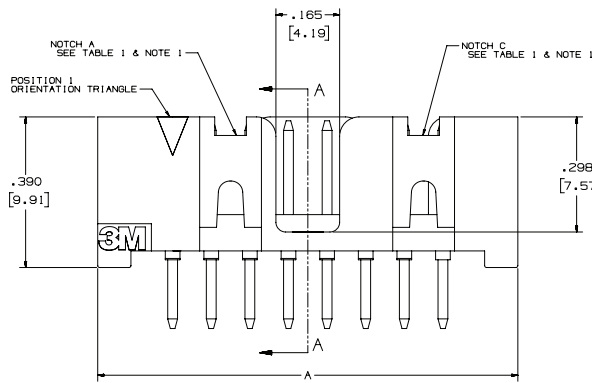
D2500 Series



Inch (mm)

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

[] Dimensions for Reference only



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

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 μm [0.25 μm] Gold (RIA E1 & C1 apply)

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

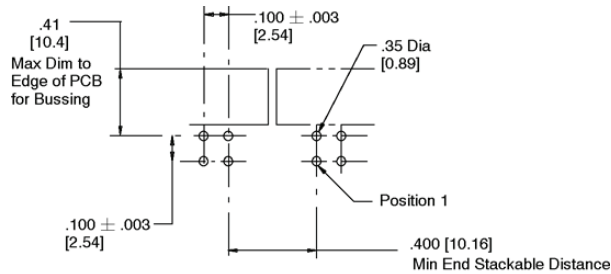
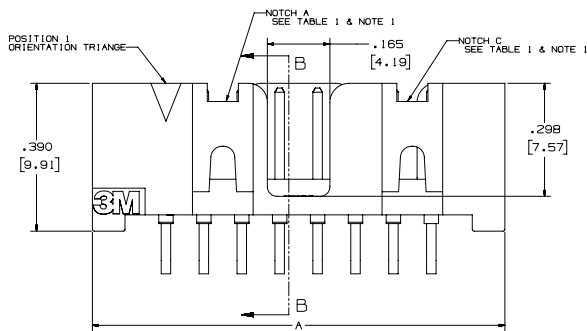
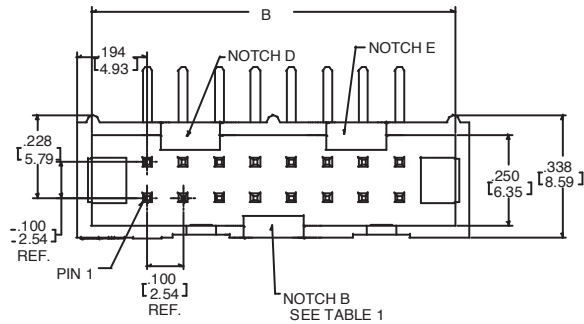
Pin Quantity:
(See Table 1)

TS-2244-F
Sheet 2 of 5

3M™ Four-Wall Header

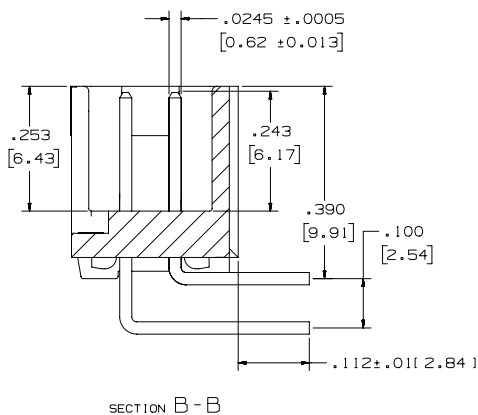
.100" x .100" Low Profile, Right Angle Through-Hole

D2500 Series



Recommended Mounting Hole Pattern

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)

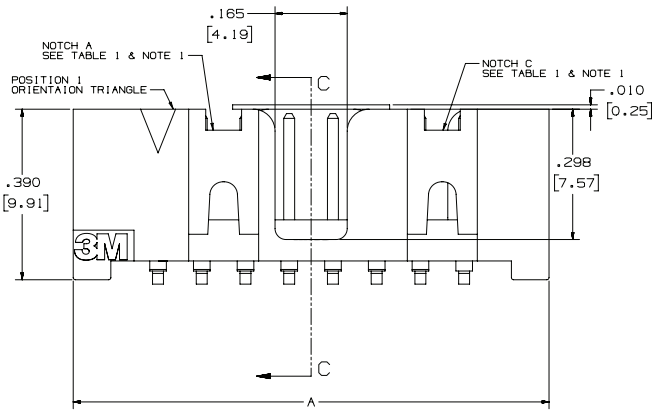
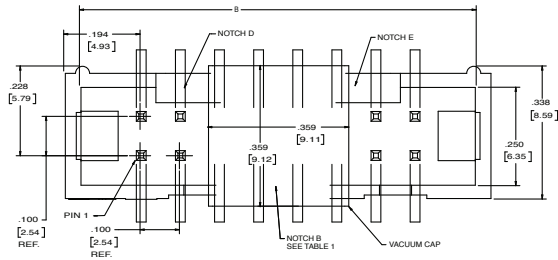
Pin Quantity: (See Table 1) Solder Tail: 02 = for .062 [1.57] thick board

TS-2244-F
Sheet 3 of 5

3M™ Four-Wall Header

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

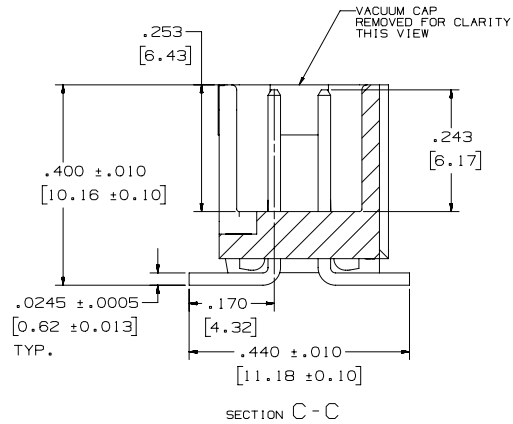
D2500 Series



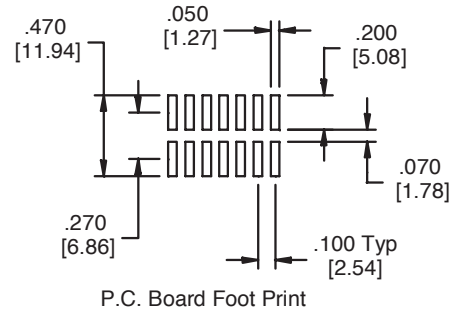
Inch [mm]		Tolerance Unless Noted	
		.0	.000
Inch		±.1	±.01 ±.005



[] Dimensions for Reference only



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:

- 1. Notches A & C will accommodate 3M Polarizing Key N3518.
- 2. 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).
- 3. Coplanarity .004 for less than 30 position, .006 for 30 and above.

Ordering Information

D25XX-6V0C-AR-XX

Pin Quantity:
(See Table)

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

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

TS-2244-F
Sheet 4 of 5

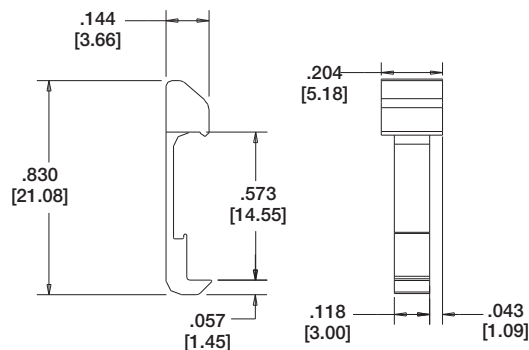
3M™ Four-Wall Header

.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



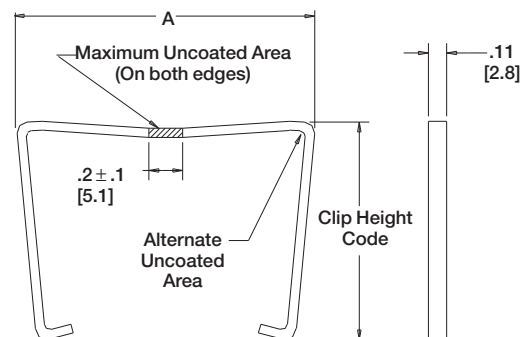
Long Snap In Latch

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

3505-8XXX

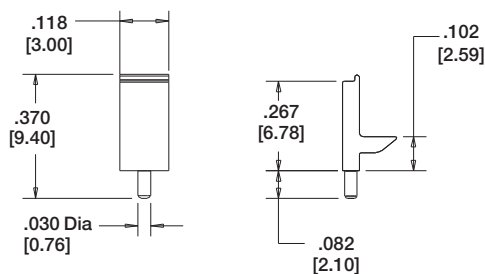
Connector Pin Count:
(See Table)

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



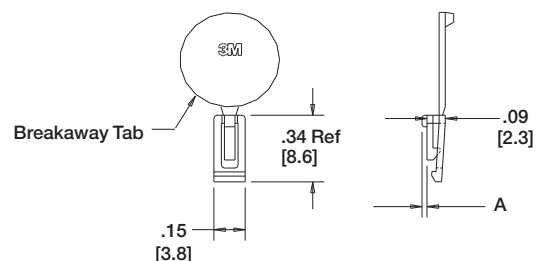
Short/Long Socket Retainer Clip

Part Number	Material	Color
3201-3	PCT	Black



Polarizing Post

Part Number	Material	Color	Dim A
N3518	LCP	Black	0.02



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

Polarizing Keys

TS-2244-F
Sheet 5 of 5

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

**3M Electronics Solutions Division**

6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3m.com/interconnects

Please recycle. Printed in USA.
© 3M 2011. All rights reserved.
RIA-2217B-E

3M is a trademark of 3M Company.