

3M™ Four-Wall Condo Header

.100" × .100" Right Angle

3000 Series



- Stacked pins conserve space on the circuit board allowing higher density packaging
- Pin quantity to 128 gives design flexibility with latching
- “HDI” alternative
- Accepts standard IDC sockets
- Mates with standard flat cable harnesses
- Optional high temperature insulator suitable for “no lead” soldering operations
- High temperature option suitable for reflow soldering using “paste in hole” techniques
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3Mconnectors.com for compliance information (RIAE1 & C1 apply)

Date Modified: October 16, 2013

TS-0774-H
Sheet 1 of 3

Physical

Insulation:

Material: Glass Filled Polyester (PBT), Glass Filled Polyester (PCT) - High Temp Option

Flammability: UL 94V-0

Color: Gray (PBT), Black (PCT)

Contact:

Material: Copper Alloy

Plating:

Underplating: 100 μ" [2.54 μm] Nickel - Overall

Wiping Area: 30 μ" [0.76 μm] Gold

Solder Tails: 200 μ" [5.08 μm] Tin Lead or Matte Tin (See Ordering Information)

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

Electrical

Current Rating: 2 A (EIA 364-70)

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 - (High Temp PCT insulator version), single pass, (profile per J-STD-020C) (PBT insulator version), maximum insulator temperature 191°C (solder wave process only)

Moisture Sensitivity Level: 1 (per J-STD-020C) High Temp. (PCT) versions only

UL File No.: E68080



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

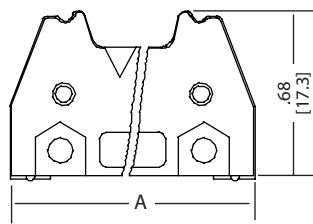
3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

3M™ Four-Wall Condo Header

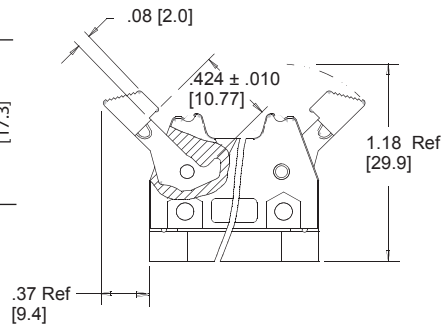
.100" × .100" Right Angle

3000 Series

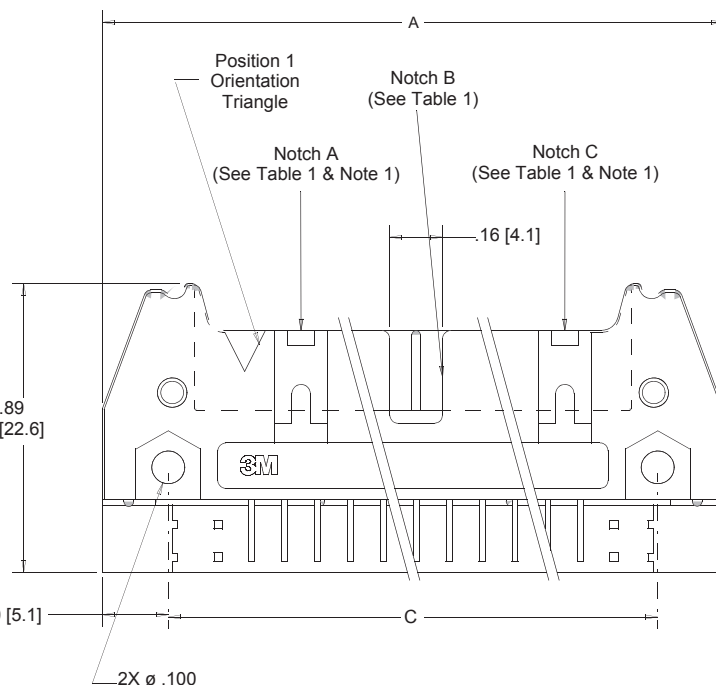
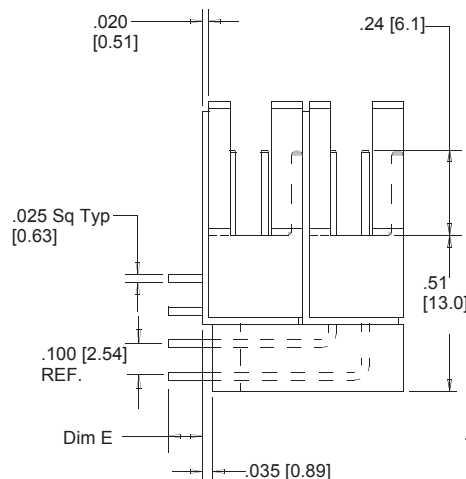
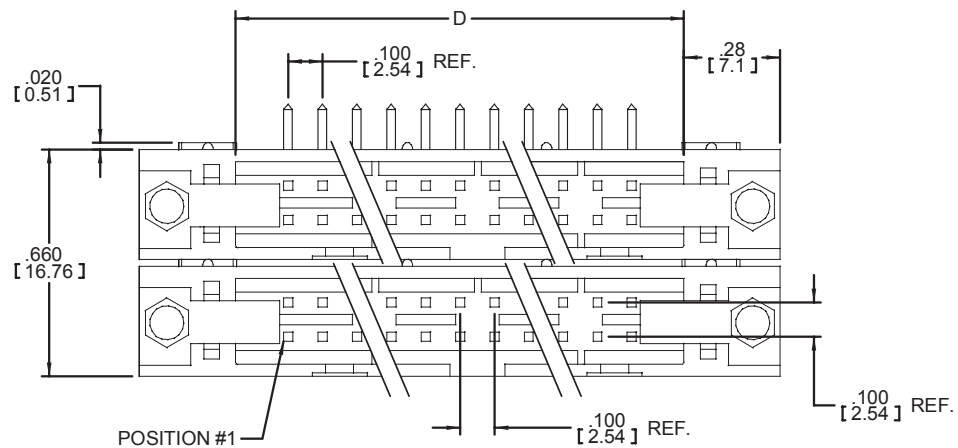
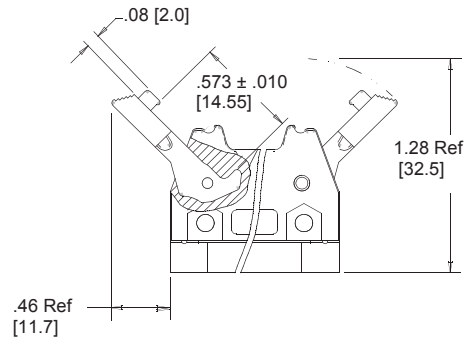
-L00X
Header without Latch Ejectors



-L20X
Header with Short Ejector/Latch
for 3M Sockets without Strain Relief



-L30X
Header with Long Ejector/Latch
for 3M Sockets with Strain Relief



TS-0774-H
Sheet 2 of 3



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

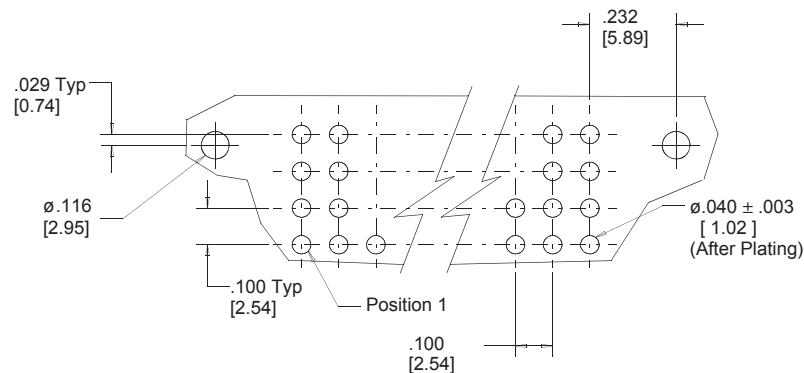
3M™ Four-Wall Condo Header

.100" × .100" Right Angle

3000 Series

Table 1					
Pin Quantity	3M Part Number	Dimensions			Polarizing Notches
		A	C	D	
20	3793	1.26 (32.1)	0.865 (21.97)	0.71 (18.0)	BC
28	3314	1.46 (37.2)	1.065 (27.05)	0.91 (23.1)	BC
32	3408	1.56 (39.7)	1.165 (29.59)	1.01 (25.6)	ABC
40	3428	1.76 (44.8)	1.365 (34.67)	1.21 (30.7)	ABC
48	3627	1.96 (49.8)	1.565 (39.75)	1.41 (35.8)	ABC
52	3429	2.06 (52.4)	1.665 (42.29)	1.51 (38.3)	ABC
60	3440	2.26 (57.4)	1.865 (47.37)	1.71 (43.4)	ABC
68	3431	2.46 (62.6)	2.065 (52.45)	1.91 (48.5)	ABC
80	3432	2.76 (70.2)	2.365 (60.07)	2.21 (56.1)	ABC
100	3433	3.26 (82.9)	2.865 (72.77)	2.71 (68.8)	ABC
120	3372	3.76 (95.6)	3.365 (85.47)	3.21 (81.5)	ABC
128	3764	3.96 (100.7)	3.565 (90.55)	3.41 (86.6)	ABC

Table 2		
Number Suffix	Contact Tail	Dim E ± .010
-XX02	02	0.112 [2.84]
-XX03	03	0.155 [3.94]



Recommended Hole Pattern

Notes:

1. Notches A & C will accommodate 3M Polarizing Key (3M Part Number 3518 or N3518).
2. 112 [2.84] tail length suitable for .062 [1.57] thick pc board.
3. Contact your 3M sales representative for custom requirements.
4. Use of snap-in style latch/ejectors in either short (X3XXX-L502XX) or X3XXX-L602XX styles, installed or shipped separately (-5 & -6 snap-in latches are dimensionally and functionally equivalent to -2 & -3 roll pin latches)
5. Mounting hardware: From solder side of pc board use #4-24 thread cutting screw (3M Part 3341-5) and .116 dia. mounting hole. See Illustrations on page 4.

If ordering Snap-In style latches separately, please use the below chart

	Short Latch	Long Latch	Color
High Temp (PBT)	3505-30	3505-31	Gray
High Temp (PPA)	N3505-30B	N3505-31B	Black

Inch (mm)			
Tolerance Unless Noted			
	.0	.00	.000
Inch	± .1	± .01	± .005

[] Dimensions for Reference only

Ordering Information

X3XXX - LXXXXX			
N = High Temp Black (PCT) (RB Plating Req'd) Blank = Std. Temp Gray (PBT) (Blank or UB Pltg. Req'd.)		RB = 30 μ" [0.76 μm] Gold with Matte Tin Tails (App. E1 & C1 Apply) Blank or UB = 30 μ" [0.76 μm] Gold with Tin Lead Tails (App. E3 & C2 Apply)	
3M Part Number		Tail	
Latch/Ejector System		02 = Solder Tail for .062 [1.57] Thick Board	
0 = No Latch/Ejector Installed		03 = Solder Tail for .094 to .125 [2.39 to 3.18] Thick Board	
2 = Short, Roll Pin Latch/Ejectors			
3 = Long, Roll Pin Latch/Ejectors			

TS-0774-H
Sheet 3 of 3



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

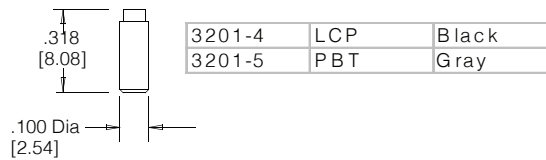
3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

3M™ Four-Wall Condo Header

.100" × .100" Right Angle

3000 Series

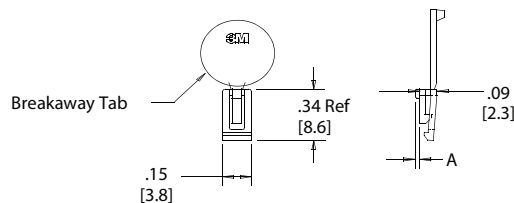
Polarizing Post



Note: Insert Post into one mounting hardware hole on bottom of header. Set post to protrude .115" [2.92]

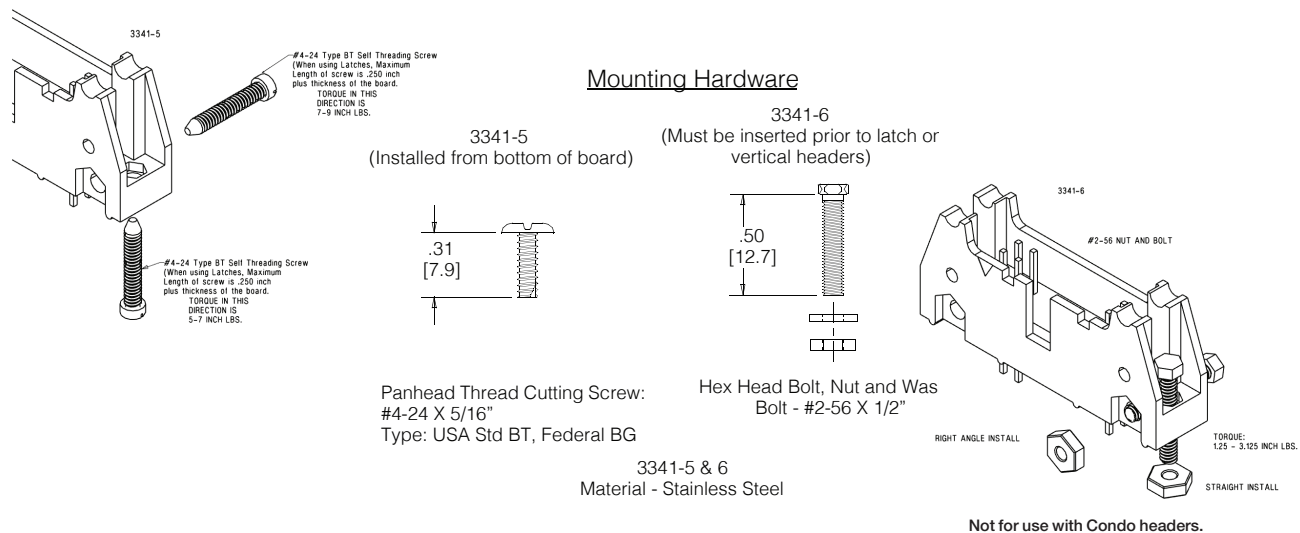
Polarizing Keys

			Dim A
N3518	LCP	Black	.02
3518	PBT	Gray	.02



Note: #2216 B/A Scotchweld can be used to adhere keys.

Mounting Hardware



TS-0774-H
Sheet 4 of 3

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.3Mconnectors.com

Please recycle. Printed in USA.
© 3M 2013. All rights reserved.
RIA-2217B-E

3M is a trademark of 3M Company.