3M™ Three-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
- Three-wall fits in VME board stacking criteria
- 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
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3Mconnectors.com for compliance information (RIA E1 & C1 apply)

Date Modified: October 15, 2013

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:	$>1 \times 10^9$ Ω 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) single pass (per J-STD-020C) PBT gray insulator, 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

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

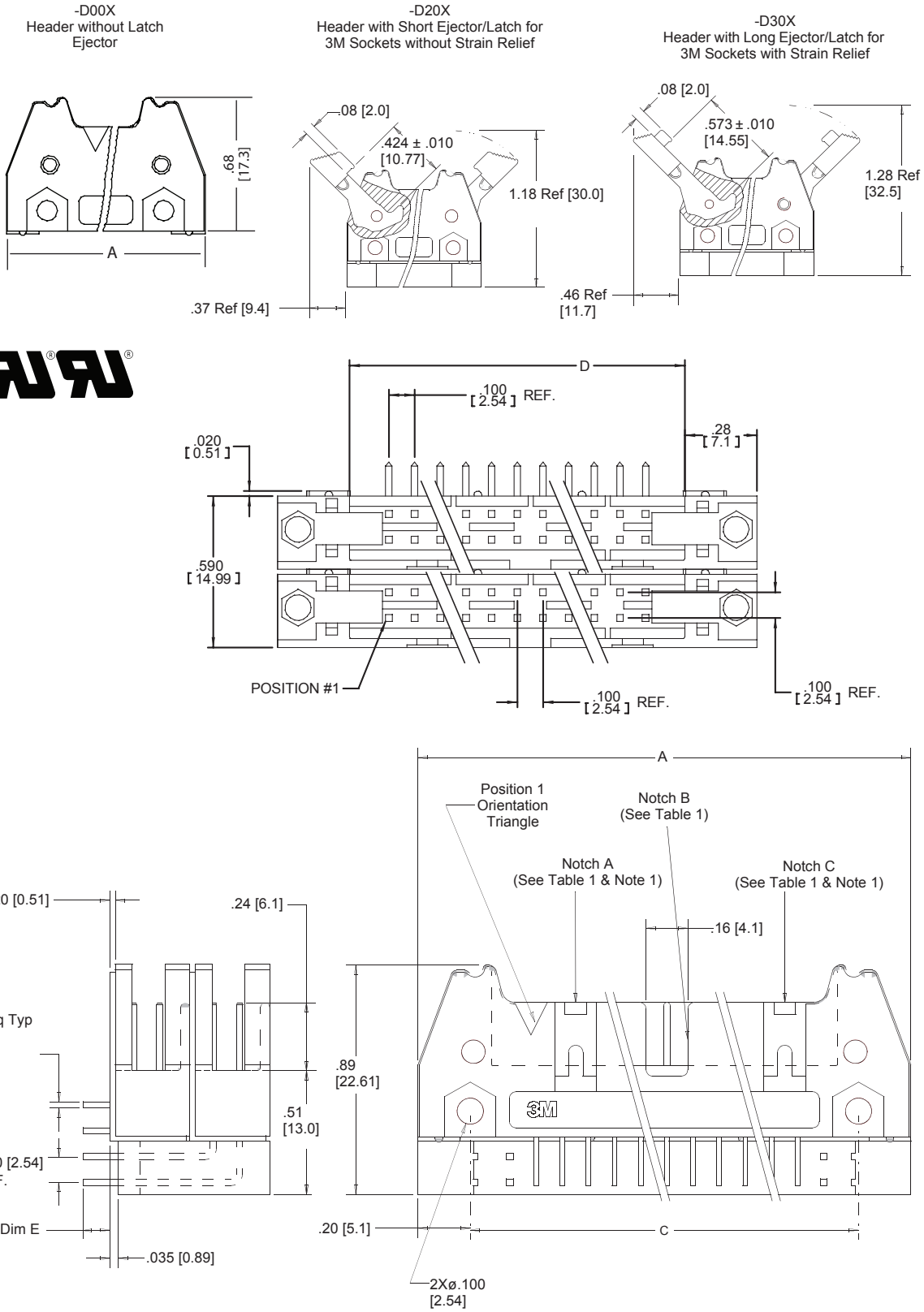
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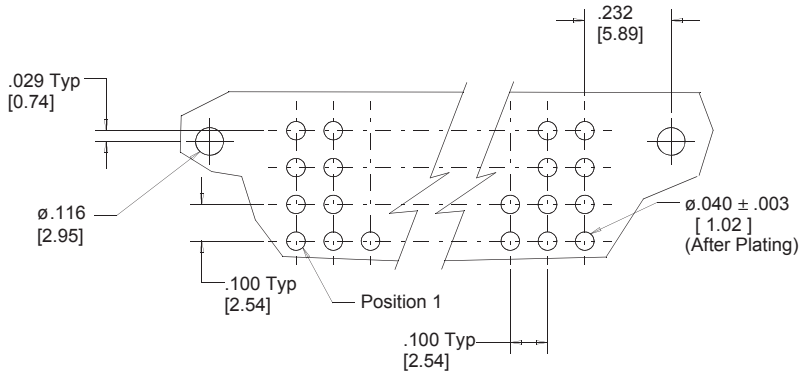
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Table 1					
Pin Quantity	3M Part Number	Dimensions			Polarizing Notches
		A	C	D	
20	3793	1.26 (32.1)	0.865 (21.97)	0.71 (18.0)	BC
28	3314	1.46 (37.2)	1.065 (27.05)	0.91 (23.1)	BC
32	3408	1.56 (39.7)	1.165 (29.59)	1.01 (25.6)	ABC
40	3428	1.76 (44.8)	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 accomodate 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-D502XX) or X3XXX-D602XX) 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 - DXXXXX

N = High Temp Black (PCT) (RB Plating Req'd)
Blank = Std. Temp Gray (PBT) (Blank or UB Pltg. Req'd.)

3M Part Number

Latch/Ejector System
0 = No Latch/Ejector Installed
2 = Short, Roll Pin Latch/Ejectors
3 = Long, Roll Pin Latch/Ejectors

Tail
02 = Solder Tail for .062 [1.57] Thick Board
03 = Solder Tail for .094 to .125 [2.39 to 3.18] Thick Board

RB = 30µ" [0.76µm] Gold with Matte Tin Tails (App. E1 & C1 Apply)
Blank or UB = 30µ" [0.76µm] Gold with Tin Lead Tails (App. E3 & C2 Apply)

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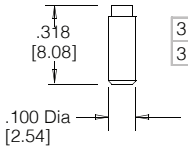
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Polarizing Post

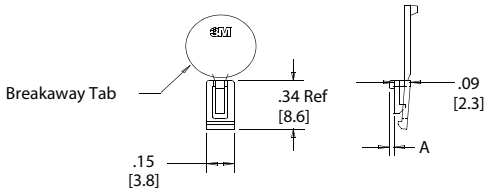


3201-4	LCP	Black
3201-5	PBT	Gray

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

Polarizing Keys

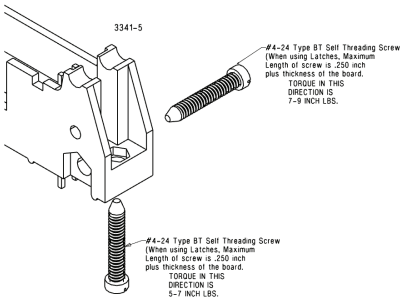
			Dim A
N3518	LCP	Black	.02
3518	PBT	Gray	.02

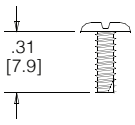


Note: #2216 B/A Scotchweld can be used to adhere keys.

Mounting Hardware

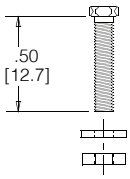
3341-5
(Installed from bottom of board)



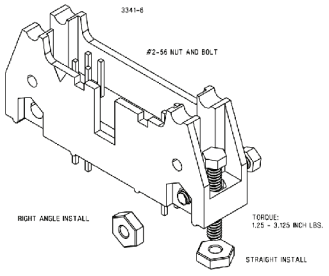


'anhead Thread Cutting Screw:
4-24 X 5/16"
ype: USA Std BT, Federal BG

3341-6
(Must be inserted prior to latch or vertical headers)



Hex Head Bolt, Nut and Wasl
Bolt - #2-56 X 1/2"



3341-5 & 6
Material - Stainless Steel

TS-0773-H
Sheet 4 of 4

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