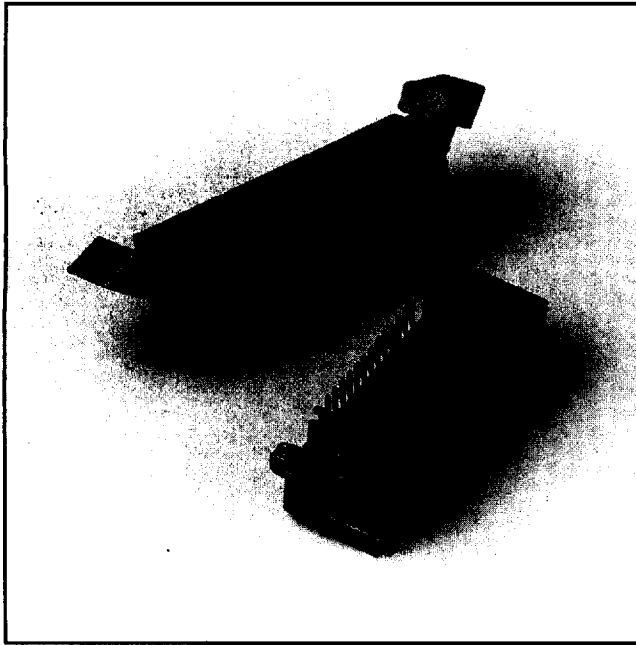


.050" x .100" Tripolarized, Latch/Ejector Header

Straight, 4 Wall, Surface Mount

810 Series



- Tripolarization to mini socket
- 50 mil x 100 mil double board density
- Nine sizes (20–100 position)
- Latch and eject feature
- High temperature dielectric

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Sheet 1 of 3

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Physical

Insulation

Material: High Temperature Plastic (LCP)

Flammability: UL 94V-0

Color: Ivory (Natural)

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

Contact

Material: Copper Alloy

Plating

Underplate: 100 μ " [2.54 μ m] Nickel — QQ-N-290, Class 2

Wiping Area: 30 μ " [0.76 μ m] Gold — MIL-G-45204, Type II, Grade C

Solder Tails: 200 μ " [5.08 μ m] 60/40 Tin Lead

Electrical

Current Rating: 0.5 A

Insulation Resistance: $> 1 \times 10^9 \Omega$ at 500 Vdc

Withstanding Voltage: 500 Vrms at Sea Level

Environmental

Temperature Rating: -55°C to $+105^\circ\text{C}$

Process Rating: 250°C @ 90 seconds Max

UL File No.: E68080

3M Electronic Products Division D 19F ■ 9035312 0004372 556 ■

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For technical, sales or ordering information call
800-225-5373

.050" x .100" Tripolarized, Latch/Ejector Header
 Straight, 4 Wall, Surface Mount

810 Series



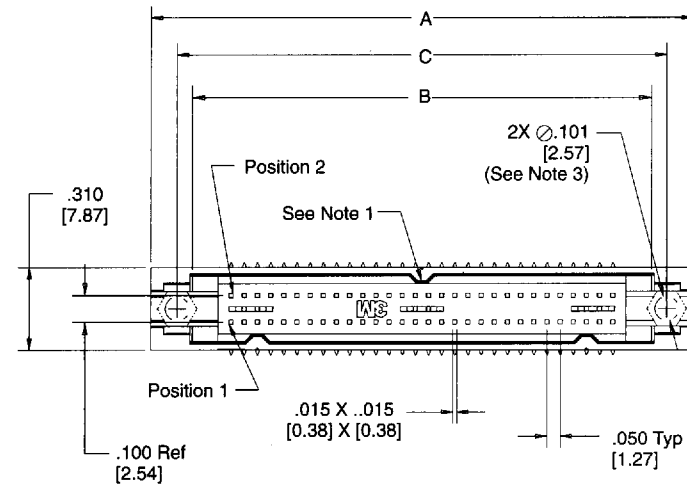
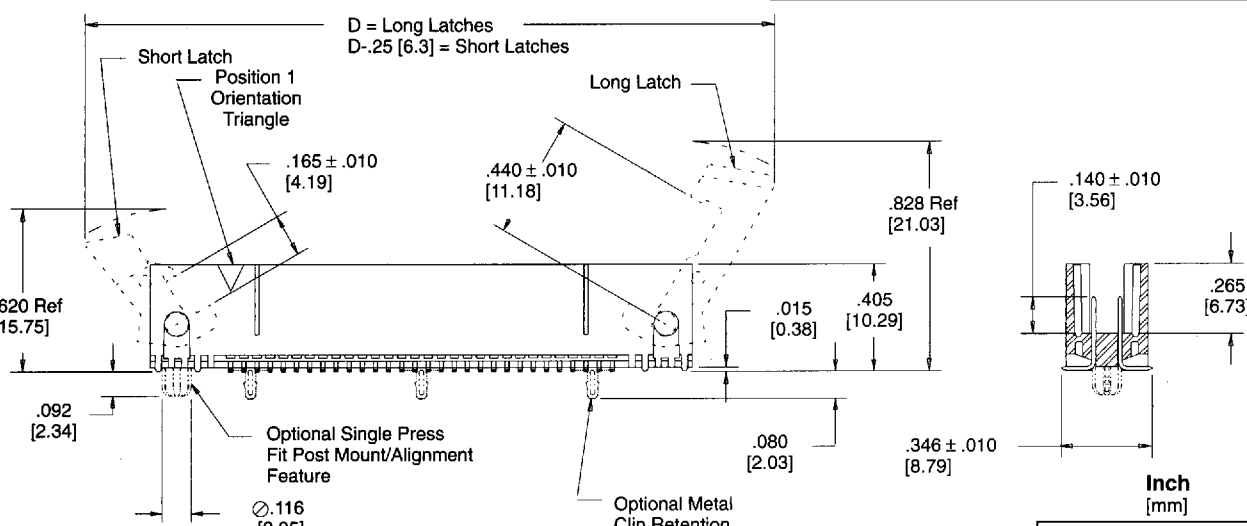



Table 1

| Contact Quantity | Dimensions | | | |
|------------------|------------------|------------------|------------------|----------------|
| | A | B | C | D Ref |
| 020 | 1.060 [26.92] | .710 [18.03] | .860 [21.84] | 1.92 [48.8] |
| 026 | 1.210 [30.73] | .860 [21.84] | 1.010 [25.65] | 2.07 [52.6] |
| 036 | 1.460 [37.08] | 1.110 [28.19] | 1.280 [32.00] | 2.32 [58.9] |
| 040 | 1.560 [39.62] | 1.210 [30.73] | 1.360 [34.54] | 2.42 [61.5] |
| 050 | 1.810 [45.97] | 1.480 [37.08] | 1.610 [40.89] | 2.67 [67.8] |
| 060 | 2.060 [52.32] | 1.710 [43.43] | 1.860 [47.24] | 2.92 [74.2] |
| 068 | 2.260 [57.04] | 1.910 [48.51] | 2.060 [52.32] | 3.12 [79.2] |
| 080 | 2.560 [65.02] | 2.210 [56.13] | 2.360 [59.94] | 3.42 [86.9] |
| 100 | 3.060 [77.72] | 2.710 [68.83] | 2.860 [72.64] | 3.92 [99.6] |



Technical drawing showing dimensions: A, B, C, D, Position 1, Position 2, 2X $\varnothing .101$ [2.57] (See Note 3), $.310$ [7.87], $.100$ Ref [2.54], $.015 \times .015$ [0.38] X [0.38], $.050$ Typ [1.27].



Technical drawing showing dimensions: D = Long Latches, D-.25 [6.3] = Short Latches, Short Latch, Position 1 Orientation Triangle, Long Latch, $.165 \pm .010$ [4.19], $.440 \pm .010$ [11.18], $.828$ Ref [21.03], $.620$ Ref [15.75], $.092$ [2.34], $\varnothing .116$ [2.95], $.015$ [0.38], $.405$ [10.29], $.080$ [2.03], $.346 \pm .010$ [8.79], $.140 \pm .010$ [3.56], $.265$ [6.73].

Optional Single Press Fit Post Mount/Alignment Feature, Optional Metal Clip Retention.

Notes:

- This polarization bump does not exist on the 20 position header.
- Recommended to be mated to the .050" X .100" 82XXX Series Wiremount Socket.
- Accepts the following mounting hole hardware:
#2-58 Machine Screw and Nut (3M Part #3341-6)

| Tolerance Unless Noted | | | |
|------------------------|----------|-----------|------------|
| | .0 | .00 | .000 |
| Inch | $\pm .1$ | $\pm .01$ | $\pm .005$ |

[] Dimensions for Reference only

Ordering Information

Header

81XXX-6X0C0X

Ejector Latch

3505-28 (Long)

3505-29 (Short)

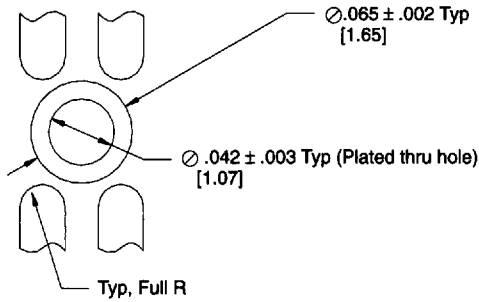
| | | |
|---------------------------------------|---|---|
| <p>Contact Quantity (See Table 1)</p> | <p>Ejector/Latch System:</p> <ul style="list-style-type: none"> 0 = None 1 = Short (Packaged Separately) 2 = Long (Packaged Separately) 5 = Short (Installed) 6 = Long (Installed) | <p>Board Mounting Options:</p> <ul style="list-style-type: none"> 0 = Screw Mount 4 = Single Press Fit Post Mount at Position 1 end 5 = Metal Retention Clip |
|---------------------------------------|---|---|

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Sheet 2 of 3

.050" x .100" Tripolarized, Latch/Ejector Header

Straight, 4 Wall, Surface Mount

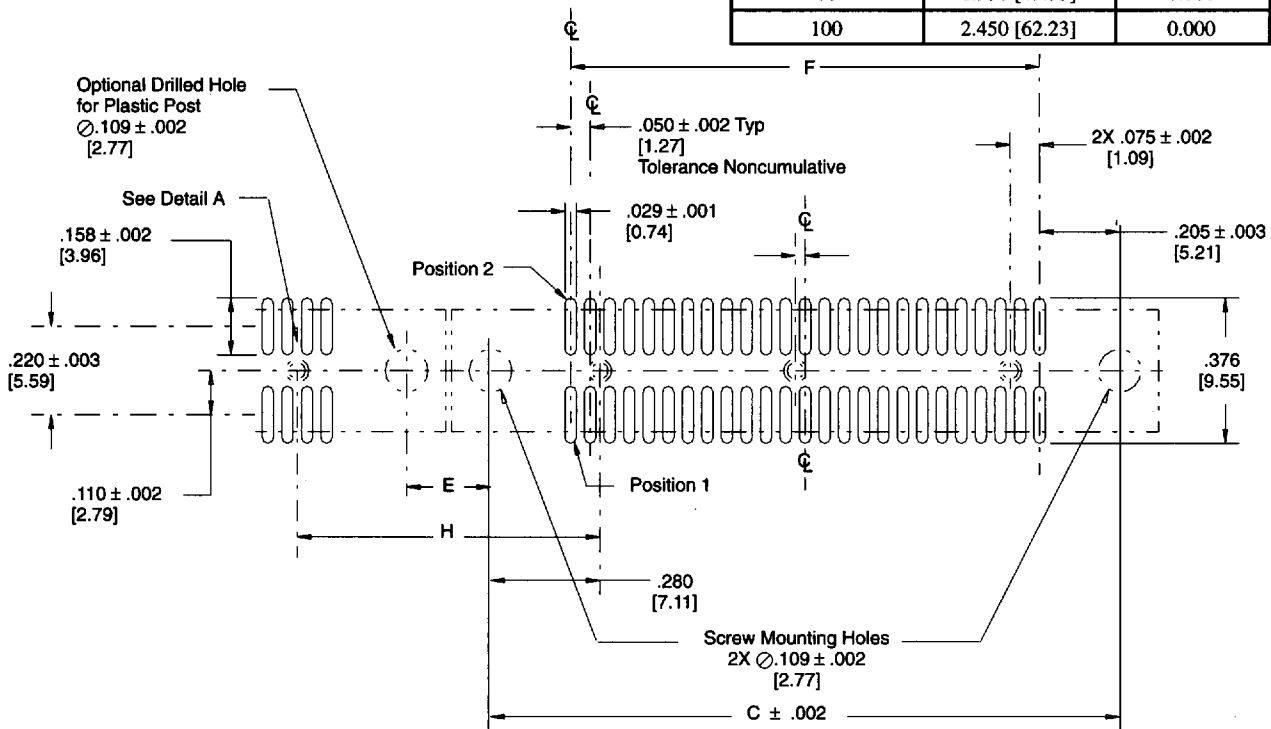
810 Series



Detail A
Optional plated thru hole
for metal clip retention

| Table 3 | | |
|-----------------|--------------|---------------|
| Ejector Latches | Dimensions | |
| | E Min | H Min |
| No | .215 [5.46] | .775 [19.69] |
| Short | .525 [13.34] | 1.085 [27.56] |
| Long | .650 [16.51] | 1.21 [30.73] |

| Table 2 | | |
|------------------|---------------|-------------|
| No. of Positions | Dimensions | |
| | F | G |
| 20 | .450 [11.43] | N/A |
| 26 | .600 [15.24] | N/A |
| 36 | .850 [21.59] | N/A |
| 40 | .950 [24.13] | N/A |
| 50 | 1.200 [30.48] | .025 [6.35] |
| 60 | 1.450 [36.83] | 0.000 |
| 68 | 1.850 [41.91] | 0.000 |
| 80 | 1.950 [49.53] | 0.000 |
| 100 | 2.450 [62.23] | 0.000 |



Recommended Mounting Hole Pattern
(Shown for mounting side of PC Board)

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Sheet 3 of 3