



## Breakaway and Retention Headers—Unshrouded

### Product Facts

- Design and inventory versatility—headers can be broken into any size needed
- Variety of popular sizes available
- Substantial time/labor savings can install all posts at one time
- Vertical and right-angle versions available in single- and double-row configurations
- Phosphor bronze posts
- Choice of gold duplex or tin plated posts
- Post lengths include .230 [5.84] and .318 [8.08] for connector mating
- Board retention feature available
- Black, glass-filled thermoplastic housings; high temperature compatible
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 
- Certified by Canadian Standards Association, File No. LR 7189 



### Performance Characteristics

#### Electrical

**Insulation Resistance** — 5,000 megohms minimum initial

**Dielectric Withstanding Voltage** — 750 V rms at sea level

#### Environmental

**Operating Temperature** — -65°C to +105°C (black thermoplastic housings)

**Current** — 3 amperes maximum per contact (dependent upon mating receptacle)

**Breakaway Headers—Unshrouded, Single-Row, .100 [2.54] Centerline**

**.025 [0.64] Square Straight Posts**



**Material and Finish**

**Housing** — Black thermoplastic, 94V-0 rated, high temperature compatible

**Posts** — Phosphor bronze, plated as follows:

**Plating A** — Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

**Plating B** — Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

**Plating C** — .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel

**Performance Characteristics (Board Retention Tails)**

**Insertion Force** — 12 lb [53.4N] max.

**Retention Force** — .25 lb [1.11N] min.

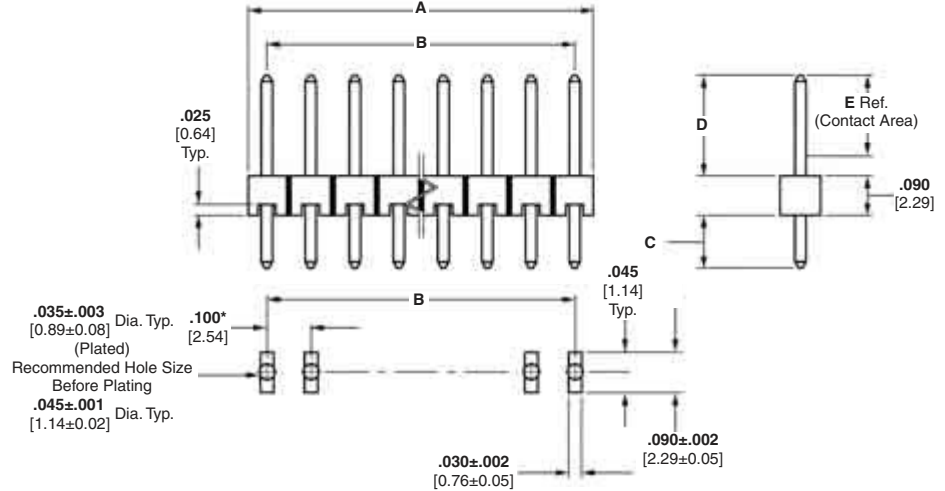
**Related Product Data**

**Mateable Connectors** — Refer to the Mating Post Selection Guide — page 90

**Technical Documents** — page 276

See mating connector for applicable product and application specifications.

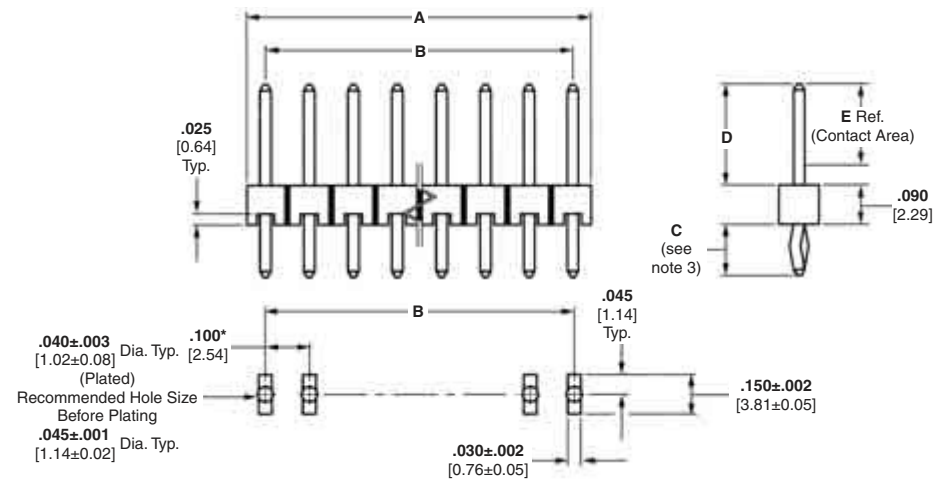
**Headers with Solder Tails**



**Recommended PC Board Mounting Pattern (for .062 [1.57] thick PC board; .008 [2.03] thick stencil)**

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

**Headers with Board Retention Tails**



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Header Style	No. of Pos.	Dimensions		C = .090 [2.29] D = .230 [5.84] E = .185 [4.70]			C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]			C = .125 [3.18] D = .318 [8.08] E = .200 [5.08]		
		A	B	Post Plating/Part Nos.			Post Plating/Part Nos.			Post Plating/Part Nos.		
				Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
With Solder Tails (See Notes 1 and 2.)	1	.084 [2.13]	—	5-146285-1	5-146284-1	5-146282-1	5-146281-1	5-146280-1	5-146278-1	5-146277-1	5-146276-1	5-146274-1
	40	3.984 [101.19]	3.900 [99.06]	9-146285-0	9-146284-0	9-146282-0	9-146281-0	9-146280-0	9-146278-0	9-146277-0	9-146276-0	9-146274-0
With Board Retention Tails (See Notes 2 and 3.)	3	.284 [7.21]	.200 [5.08]	5-146297-3	5-146296-3	5-146294-3	5-146293-3	5-146292-3	5-146290-3	5-146289-3	5-146288-3	5-146286-3
	40	3.984 [101.19]	3.900 [99.06]	9-146297-0	9-146296-0	9-146294-0	9-146293-0	9-146292-0	9-146290-0	9-146289-0	9-146288-0	9-146286-0

- Notes:** 1. Headers without retention tails may be broken to the desired number of positions using **Tool Kit No. 314818-1 (not shown)**.  
 2. Headers are also available in sizes 2 thru 39 positions (with Solder Tails) and 4 thru 39 positions (with Board Retention Tails). When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base part number that corresponds with the desired size. For example, the complete part number for an 8-position header with solder tails (C dimension .090 [2.29], post plating A) would be 5-146285-8. The complete part number for a 26-position header with board retention tails (C dimension .120 [3.05], post plating B) would be 7-146292-6. This part numbering system applies only to this page.  
 3. For C dimensions .120 [3.05] and .125 [3.18], board retention using kinked tails are for headers 6 positions and smaller; headers 7 positions and larger use swaged tails. Headers with a C dimension of .090 [2.29] have swaged tails for all sizes.

**Note:** All part numbers are RoHS compliant.