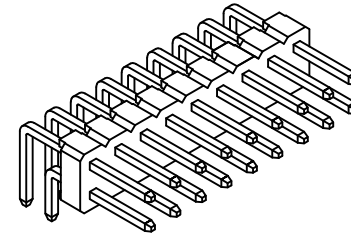
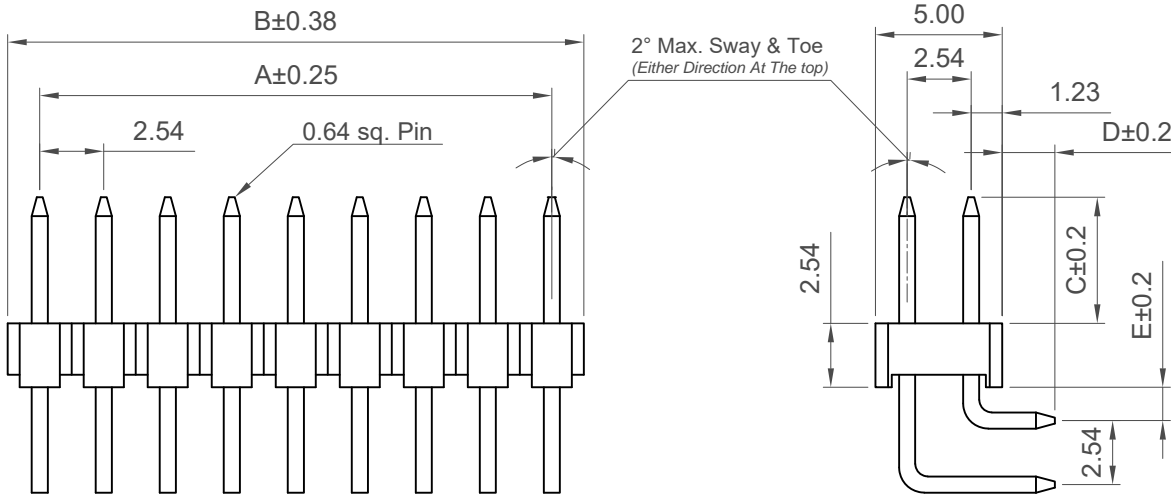


**Recommended PCB Layout**



| Number of Contacts | Dimensions |        |
|--------------------|------------|--------|
|                    | A          | B      |
| 4                  | 2.54       | 5.08   |
| 6                  | 5.08       | 7.62   |
| 8                  | 7.62       | 10.16  |
| 10                 | 10.16      | 12.70  |
| 12                 | 12.70      | 15.24  |
| 14                 | 15.24      | 17.78  |
| 16                 | 17.78      | 20.32  |
| 18                 | 20.32      | 22.86  |
| 20                 | 22.86      | 25.40  |
| 22                 | 25.40      | 27.94  |
| 24                 | 27.94      | 30.48  |
| 26                 | 30.48      | 33.02  |
| 28                 | 33.02      | 35.56  |
| 30                 | 35.56      | 38.10  |
| 32                 | 38.10      | 40.64  |
| 34                 | 40.64      | 43.18  |
| 36                 | 43.18      | 45.72  |
| 38                 | 45.72      | 48.26  |
| 40                 | 48.26      | 50.80  |
| 42                 | 50.80      | 53.34  |
| 44                 | 53.34      | 55.88  |
| 46                 | 55.88      | 58.42  |
| 48                 | 58.42      | 60.96  |
| 50                 | 60.96      | 63.50  |
| 52                 | 63.50      | 66.04  |
| 54                 | 66.04      | 68.58  |
| 56                 | 68.58      | 71.12  |
| 58                 | 71.12      | 73.66  |
| 60                 | 73.66      | 76.20  |
| 62                 | 76.20      | 78.74  |
| 64                 | 78.74      | 81.28  |
| 66                 | 81.28      | 83.82  |
| 68                 | 83.82      | 86.36  |
| 70                 | 86.36      | 88.90  |
| 72                 | 88.90      | 91.44  |
| 74                 | 91.44      | 93.98  |
| 76                 | 93.98      | 96.52  |
| 78                 | 96.52      | 99.06  |
| 80                 | 99.06      | 101.60 |



**Specifications**

**Material**  
 Contact: Copper Alloy  
 Insulator Material:  
 Standard: Polyamide, Nylon 6T, UL 94V-0  
 Options: Polymer, LCP, UL 94V-0  
 Polyester, PBT, UL 94V-0

**Plating**  
 See Ordering Grid

**Electrical**  
 Current Rating: 3 Amp Per Pin  
 Insulator Resistance: 1000 MΩ min.  
 Contact Resistance: 20 mΩ max.  
 Dielectric Withstanding: AC 600 V

**Environmental & Mechanical**  
 Operating Temperature: -40° to +105°C  
 Soldering Process:

Nylon 6T (Standard) -  
 IR Reflow: 260°C for 10 sec.  
 Wave: 230°C for 5-10 sec.  
 Manual Solder: 350°C for 3-5 sec

LCP (Option) -  
 IR Reflow: 260°C for 10 sec.  
 Wave: 250°C for 5-10 sec.  
 Manual Solder: 350°C for 3-5 sec

PBT (Option) -  
 Manual Solder: 330°C for 3-5 sec.  
 (Not suitable for hi-temp process)

**Mates with (Subject to pin length)**  
 BG120 BG121 BG140 BG150 BG152  
 BG160 BG165 BG166 BG170 BG175  
 BG180 BG185 BG190 BG195 BG200  
 BG210 BG220

**Perfect Planar Mating with**  
 BG151 BG225

**Ordering Grid**  
 BG085-XX-X-XXXX-XXXX-XXXX-X-X

**No. of Contacts**  
 04 to 80

**Contact Plating**  
 A = Gold Flash All Over (Standard)  
 B = Selective Gold Flash Contact Area/Tin On Tail  
 C = Tin All Over  
 G = 10µ" Gold Contact Area/Tin On Tail  
 I = 30µ" Gold Contact Area/Tin On Tail

**Request Samples and Quotation**

**Packing Options**  
 G = Plastic Box (Standard - 04 Contacts)  
 D = Tube (Standard - 06-80 contacts)  
 B = Tape & Reel with Cap (Available for 04-70 contacts)  
 E = Tube with Cap

**Insulator Material**  
 N = Nylon 6T (Standard)  
 P = PBT  
 L = LCP

**Dimension C (1/100mm) (Post Height)**  
 0600 = 6.00mm (Standard)  
 Or specify custom Post Height  
 eg. 0250 = 2.50mm  
 (Maximum 1200 = 12.00mm)  
 (Minimum 0100 = 1.00mm)

**Dimension E (1/100mm) (Insulator to Pin Centre)**  
 0120 = 1.20mm (Standard)  
 Or specify custom Insulator to Pin Centre length  
 eg. 0250 = 2.50mm  
 (Maximum 0500 = 5.00mm)  
 (Minimum 0032 = 0.32mm)

**Dimension D (1/100mm) (Insulator to Pin End)**  
 0300 = 3.00mm (Standard)  
 Or specify custom Insulator to Pin End length  
 eg. 0250 = 2.50mm  
 (Maximum 0600 = 6.00mm)  
 (Minimum 0100 = 1.00mm)

|                   |                |                                     |                             |
|-------------------|----------------|-------------------------------------|-----------------------------|
| Part Number       |                | Product Description                 |                             |
| BG085             |                | 2.54mm Pitch Pin Header             |                             |
| Drawing Date      |                | Dual Row, Through Hole, Horizontal  |                             |
| 30th October 2006 |                |                                     |                             |
| By                | CC             | Tolerances (Except as Noted)        | Units:                      |
| Detail            | BG085<br>F PCN | Length X ± 0.30<br>Angle X.X ± 0.20 | Metric (mm)                 |
| Revision          | F3             | X.XX ± 0.15                         | X.° ± 5°<br>X.X° ± 2°       |
| Date              | 09/02/23       | X.XXX ± 0.10                        | X.XX° ± 1°<br>X.XXX° ± 0.5° |



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|              |              |               |
|--------------|--------------|---------------|
| Not to Scale | Drawn By LYH | Sheet No. 1/1 |
|--------------|--------------|---------------|