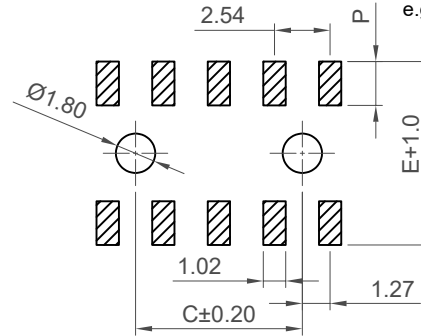
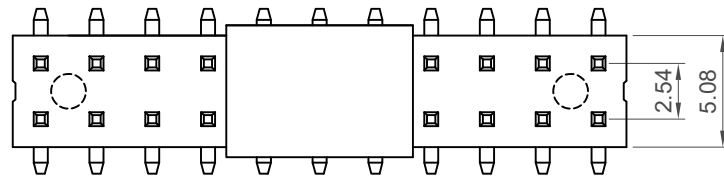
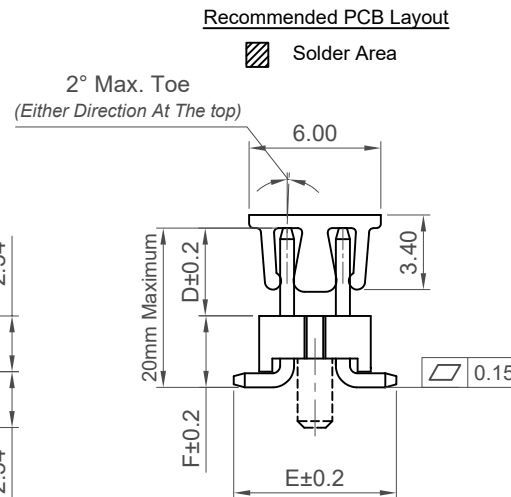
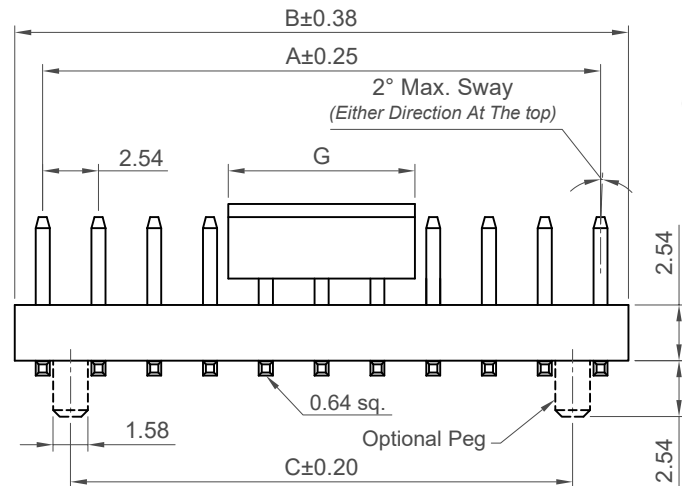
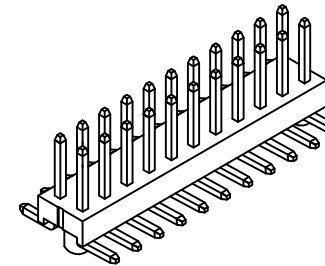


H  
G  
F  
E  
D  
C  
B  
A



Note:  $P=(E+1-2)/2$   
e.g.:  $E=7.37\text{mm}$ ,  $P=3.185\text{mm}$



Recommended PCB Layout

■ Solder Area

### Specifications

#### Material

Insulator:

Standard: Polymer, LCP, UL94V-0

Option: Polyamide, Nylon 6T, UL94V-0

Contact: Copper Alloy

#### Plating

Contact: See Ordering Grid

#### Electrical

Current Rating: 3 Amp Per Pin

Contact Resistance: 20 mΩ max.

Insulation Resistance: 1000 MΩ min.

Dielectric Withstand Voltage: 600 V AC

#### Mechanical & Environmental

Operating Temperature: -40°C to +105°C

#### Soldering Process

LCP (Standard)

IR Reflow: 260°C for 10 sec.

Manual Solder: 350°C for 3-5 sec.

Nylon 6T/9T (Option)

IR Reflow: 260°C for 10 sec.

Manual Solder: 350°C for 3-5sec.

#### Mates with (Subject to Pin Length)

BG120 BG121 BG140 BG150 BG151

BG152 BG160 BG165 BG166 BG170

BG175 BG180 BG185 BG190 BG195

BG200 BG210 BG220 BG225

BG121 Recommended mating length 3.00mm

BG166 Recommended mating length 3.00mm

| Number of Contacts | Dimensions |        |       |      |
|--------------------|------------|--------|-------|------|
|                    | A          | B      | C     | G    |
| 4                  | 2.54       | 5.08   | -     | 5.00 |
| 6                  | 5.08       | 7.62   | 2.54  | 6.00 |
| 8                  | 7.62       | 10.16  | 5.08  |      |
| 10                 | 10.16      | 12.70  | 7.62  |      |
| 12                 | 12.70      | 15.24  | 10.16 |      |
| 14                 | 15.24      | 17.78  | 12.70 |      |
| 16                 | 17.78      | 20.32  | 15.24 | 8.50 |
| 18                 | 20.32      | 22.86  | 17.78 |      |
| 20                 | 22.86      | 25.40  | 20.32 |      |
| 22                 | 25.40      | 27.94  | 22.86 |      |
| 24                 | 27.94      | 30.48  | 25.40 |      |
| 26                 | 30.48      | 33.02  | 27.94 |      |
| 28                 | 33.02      | 35.56  | 30.48 |      |
| 30                 | 35.56      | 38.10  | 33.02 |      |
| 32                 | 38.10      | 40.64  | 35.56 |      |
| 34                 | 40.64      | 43.18  | 38.10 |      |
| 36                 | 43.18      | 45.72  | 40.64 |      |
| 38                 | 45.72      | 48.26  | 43.18 |      |
| 40                 | 48.26      | 50.80  | 45.72 |      |
| 42                 | 50.80      | 53.34  | 48.26 |      |
| 44                 | 53.34      | 55.88  | 50.80 |      |
| 46                 | 55.88      | 58.42  | 53.34 |      |
| 48                 | 58.42      | 60.96  | 55.88 |      |
| 50                 | 60.96      | 63.50  | 58.42 |      |
| 52                 | 63.50      | 66.04  | 60.96 |      |
| 54                 | 66.04      | 68.58  | 63.50 |      |
| 56                 | 68.58      | 71.12  | 66.04 |      |
| 58                 | 71.12      | 73.66  | 68.58 |      |
| 60                 | 73.66      | 76.20  | 71.12 |      |
| 62                 | 76.20      | 78.74  | 73.66 |      |
| 64                 | 78.74      | 81.28  | 76.20 |      |
| 66                 | 81.28      | 83.82  | 78.74 |      |
| 68                 | 83.82      | 86.36  | 81.28 |      |
| 70                 | 86.36      | 88.90  | 83.82 |      |
| 72                 | 88.90      | 91.44  | 86.36 |      |
| 74                 | 91.44      | 93.98  | 88.90 |      |
| 76                 | 93.98      | 96.52  | 91.44 |      |
| 78                 | 96.52      | 99.06  | 93.98 |      |
| 80                 | 99.06      | 101.60 | 96.52 |      |

Ordering Grid

|       |    |   |   |      |      |      |   |   |                               |
|-------|----|---|---|------|------|------|---|---|-------------------------------|
| BG050 | XX | X | X | XXXX | XXXX | XXXX | X | X | Request Samples and Quotation |
|-------|----|---|---|------|------|------|---|---|-------------------------------|

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

Locating Peg  
0 = Without  
1 = With

Packing Options  
B = Tape and Reel with Cap (Standard)  
D = Tube  
E = Tube with Cap

Insulator Material  
L = LCP (Standard)  
N = Nylon 6T  
9 = Nylon 9T

Dimension F (1/100mm) (PCB to Top of Insulator)  
0350 = 3.50mm (Standard)  
Or specify custom length  
eg 0320 = 3.20mm (Minimum)

Dimension E (1/100mm) (Footprint Width)  
0737 = 7.37mm (Standard)  
Or specify custom footprint width  
eg 1000 = 10.00mm (minimum 7.37mm)  
(Tooling charge may be apply)

Dimension D (1/100mm) (Post Height)  
0300 = 3.00mm (Standard)  
0450 = 4.50mm (Standard)  
0650 = 6.50mm (Standard)  
Or specify custom post height  
eg 0550 = 5.50mm  
(Maximum 1500=15.00mm)  
(Minimum 0100=1.00mm)

|                    |             |                                                            |                    |
|--------------------|-------------|------------------------------------------------------------|--------------------|
| Part Number        |             | Product Description                                        |                    |
| BG050              |             | 2.54mm Pitch Pin Header, Dual Row, Surface Mount, Vertical |                    |
| Drawing Date       |             |                                                            |                    |
| 23rd December 2014 |             |                                                            |                    |
| By                 | KY          | Tolerances (Except as Noted)                               | Units: Metric (mm) |
| Detail             | BG050 E PCN | X. ± 0.30                                                  | Angle              |
| Revision           | E7          | X.X ± 0.20                                                 |                    |
| Date               | 24/10/24    | X.XX ± 0.15                                                |                    |
|                    |             | X.XXX ± 0.10                                               |                    |



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