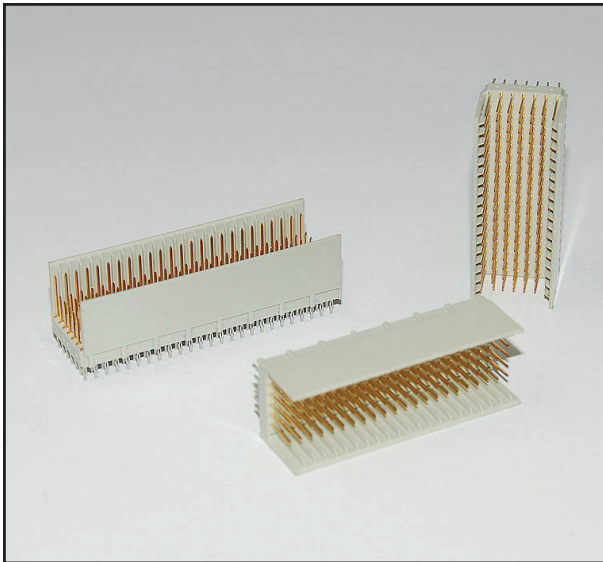


# 3M™ MetPak™ CP2 Press-Fit Header

2 mm Type B, 95, 110 and 125 Signal Contacts

CP2 Series



- 25 mm basic system unit
- 38, 44 and 50 mm module
- 2 mm grid spacing allows for high signal density at low cost
- “Eye of the Needle” compliant pin press-fit design helps reduce manufacturing time and cost
- Three contact mating levels for Early Mate Late Break or “Hot Swap” applications help reduce manufacturing time and cost
- Feed through termination available for midplane applications
- Additional grounding rows available for improved ground bounce and EMI immunity
- Mates with 5 row 3M™ MetPak™ HSHM, HM, and CP2 sockets
- End to end stackable with 5 row 3M™ MetPak™ HSHM, HM, and CP2 headers
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3Mconnector.com](http://www.3Mconnector.com) for compliance information (RIA E1 & C1 apply)

Date Modified: January 19, 2010

TS-2267-B  
Sheet 1 of 7

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## Physical

### Insulation:

Material: Glass Filled Polyester (PBT)  
Flammability: UL94V-0

### Contact:

Material: Copper Alloy  
Plating: See Ordering Information

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## Mechanical

Mating Force:  $\leq 0.75\text{N/PIN}$   
Withdrawl Force:  $\geq 0.15\text{N/PIN}$   
Mating and Un-mating Operations: 50

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## Electrical

Electrical Load: 1.0 A at +70°C  
Contact Resistance:  $\leq 20\text{ m}\Omega$   
Insulation Resistance:  $\geq 10,000\text{ M}\Omega$   
Test Voltage: 750 VAC<sub>RMS</sub>

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## Environmental

Temperature Ratings: -55°C to +125°C

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## PCB Data

Recommended PCB Plated Through Hole:  $\Theta 0.6\pm 0.05\text{ mm}$   
Drill Hole Diameter:  $\Theta 0.7\pm 0.02\text{ mm}$   
Hole platings: Cu 25~50  $\mu\text{m}$ , Sn or SnPb < 10  $\mu\text{m}$   
PCB thickness: 2.4-5.6 mm for 3.7 mm tails, 1.4-5.6 mm for 2.3 mm tails  
Press-In Force:  $\leq 204\text{N/pin}$  on nominal hole diameter  
Retention Force:  $\geq 13.5\text{N/pin}$  on nominal hole diameter

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**3M**

Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnector.com>

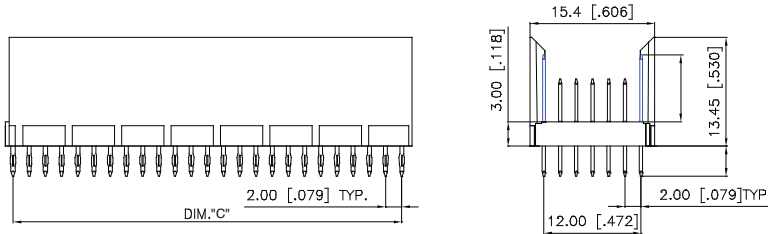
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**800-225-5373**

# 3M™ MetPak™ CP2 Press-Fit Header

2 mm Type B, 95, 110 and 125 Signal Contacts

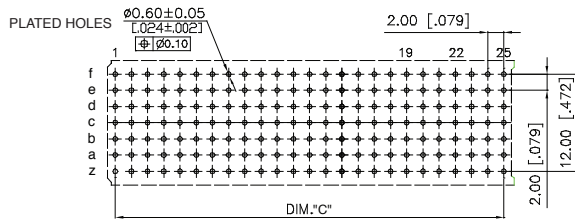
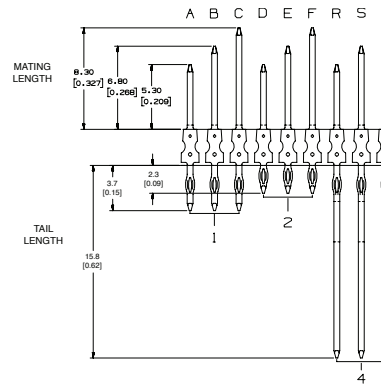
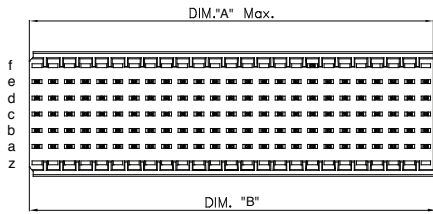
CP2 Series

| Signal Contact Quantity | Dimension A | Dimension B | Dimension C |
|-------------------------|-------------|-------------|-------------|
| 95                      | 38.00       | 38.30       | 36.00       |
| 110                     | 44.00       | 44.30       | 42.00       |
| 125                     | 50.00       | 50.30       | 48.00       |



| mm [Inch]              |    |     |      |
|------------------------|----|-----|------|
| Tolerance Unless Noted |    |     |      |
|                        | 0. | .0  | .00  |
| mm                     | 1  | 0.3 | 0.13 |

[ ] Dimensions for Reference only



Recommended PCB Layout

## Ordering Information

### CP2-HBXXX-XXX-XXXX

Number of Signal Contacts  
095, 110, 125

Grounding Options:  
G= with ground pins  
Blank= without ground pins

Loading Configurations and EMLB Patterns  
(see diagrams on following pages)

Primary Tail Length  
1= 3.7 mm  
2= 2.3 mm  
4= 15.8 mm

#### Plating Options

TG30= 30~40 μm Gold Contact Area  
100~200 μm Bright Tin-Lead  
50~80 μm Nickel Underplate  
(RIA E2 & C2 apply)

FJ= 10~20 μm Gold Contact Area  
100~200 μm Matte Tin  
50~80 μm Nickel Underplate  
(RIA E1 & C1 apply)

KR= 30~40 μm Gold Contact Area  
100~200 μm Matte Tin  
50~80 μm Nickel Underplate  
(RIA E1 & C1 apply)

KV= 30~40 μm Two Gold Contact Areas  
50~80 μm Nickel Underplate  
(RIA E2 & C2 apply)

- This diagram serves only for Part Number descriptive definitions.
- For standard product configuration please see following pages.

PLEASE CONTACT YOUR LOCAL SALES REPRESENTATIVE FOR CUSTOMER SPECIFIC PRODUCT CONFIGURATIONS.

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Sheet 2 of 7

# 3M™ MetPak™ CP2 Press-Fit Header

2 mm Type B, 95, 110 and 125 Signal Contacts

CP2 Series

| CP2-HB095-E1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | Connector Type B19 |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|--------------------|
| F                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |
| E                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| D                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| C                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| B                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| A                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| Z                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |
|                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19                 |

| CP2-HB095-GE1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | Connector Type B19 |
|--------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|--------------------|
| F                  | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  |                    |
| E                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| D                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| C                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| B                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| A                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |
| Z                  | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  |                    |
|                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19                 |

| CP2-HB095-A1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | Connector Type B19 |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|--------------------|
| F                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |
| E                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| D                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| C                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| B                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| A                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| Z                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |
|                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19                 |

| CP2-HB095-GA1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | Connector Type B19 |
|--------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|--------------------|
| F                  | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  |                    |
| E                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| D                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| C                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| B                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| A                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  |                    |
| Z                  | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  |                    |
|                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19                 |

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Sheet 3 of 7

# 3M™ MetPak™ CP2 Press-Fit Header

2 mm Type B, 95, 110 and 125 Signal Contacts

CP2 Series

| CP2-HB095-GA4-KV |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | Connector Type B19 |  |
|------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|--------------------|--|
| F                | T | T | T | T | T | T | T | T | T | T  | T  | T  | T  | T  | T  | T  | T  | T  | T                  |  |
| E                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R                  |  |
| D                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R                  |  |
| C                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R                  |  |
| B                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R                  |  |
| A                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R                  |  |
| Z                | T | T | T | T | T | T | T | T | T | T  | T  | T  | T  | T  | T  | T  | T  | T  | T                  |  |
|                  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19                 |  |

| Signal Contact Configuration Worksheet |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | Connector Type B19 |  |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|--------------------|--|
| F                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |  |
| E                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |  |
| D                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |  |
| C                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |  |
| B                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |  |
| A                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |  |
| Z                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                    |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19                 |  |

| CP2-HB110-E1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    | Connector Type B22 |  |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|--|
| F                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |                    |  |
| E                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| D                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| C                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| B                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| A                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| Z                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |                    |  |
|                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22                 |  |

| CP2-HB110-GE1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    | Connector Type B22 |  |
|--------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|--|
| F                  | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  |                    |  |
| E                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| D                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| C                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| B                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| A                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |                    |  |
| Z                  | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  |                    |  |
|                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22                 |  |

# 3M™ MetPak™ CP2 Press-Fit Header

2 mm Type B, 95, 110 and 125 Signal Contacts

CP2 Series

## CP2-HB110-GE1-TG30

Connector Type B22

|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|
| F | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  |
| E | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |
| D | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |
| C | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |
| B | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |
| A | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  |
| Z | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  |
|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |

## CP2-HB110-GA1-TG30

Connector Type B22

|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|
| F | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  |    |
| E | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  |
| D | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  |
| C | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  |
| B | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  |
| A | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  |
| Z | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  |
|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |

## CP2-HB110-GA4-KV

Connector Type B22

|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|
| F | T | T | T | T | T | T | T | T | T | T  | T  | T  | T  | T  | T  | T  | T  | T  | T  | T  | T  | T  |
| E | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| D | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| C | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| B | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| A | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| Z | T | T | T | T | T | T | T | T | T | T  | T  | T  | T  | T  | T  | T  | T  | T  | T  | T  | T  | T  |
|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |

## Signal Contact Configuration Worksheet

Connector Type B22

|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|
| F |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
| E |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
| D |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
| C |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
| B |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
| A |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Z |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |
|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |

# 3M™ MetPak™ CP2 Press-Fit Header

2 mm Type B, 95, 110 and 125 Signal Contacts

CP2 Series

| CP2-HB125-E1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    | Connector Type B25 |    |    |    |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|----|----|----|
| F                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |                    |    |    |    |
| E                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| D                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| C                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| B                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| A                 | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| Z                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |                    |    |    |    |
|                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22                 | 23 | 24 | 25 |

| CP2-HB125-GE1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    | Connector Type B25 |    |    |    |
|--------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|----|----|----|
| F                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| E                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| D                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| C                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| B                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| A                  | A | A | A | A | A | A | A | A | A | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A  | A                  |    |    |    |
| Z                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
|                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22                 | 23 | 24 | 25 |

| CP2-HB125-A1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    | Connector Type B25 |    |    |    |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|----|----|----|
| F                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |                    |    |    |    |
| E                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| D                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| C                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| B                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| A                 | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| Z                 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |                    |    |    |    |
|                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22                 | 23 | 24 | 25 |

| CP2-HB125-GA1-TG30 |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    | Connector Type B25 |    |    |    |
|--------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|----|----|----|
| F                  | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C                  |    |    |    |
| E                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| D                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| C                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| B                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| A                  | B | B | B | B | B | B | B | B | B | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B  | B                  |    |    |    |
| Z                  | C | C | C | C | C | C | C | C | C | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C                  |    |    |    |
|                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22                 | 23 | 24 | 25 |

# 3M™ MetPak™ CP2 Press-Fit Header

2 mm Type B, 95, 110 and 125 Signal Contacts

CP2 Series

| CP2-HB125-GA4-KV |   |   |   |   |   |   |   |   |   |    |    |    |    |    | Connector Type B25 |    |    |    |    |    |    |    |    |    |    |
|------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|--------------------|----|----|----|----|----|----|----|----|----|----|
| F                | T | T | T | T | T | T | T | T | T | T  | T  | T  | T  | T  | T                  | T  | T  | T  | T  | T  | T  | T  | T  | T  |    |
| E                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R                  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| D                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R                  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| C                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R                  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| B                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R                  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| A                | R | R | R | R | R | R | R | R | R | R  | R  | R  | R  | R  | R                  | R  | R  | R  | R  | R  | R  | R  | R  | R  | R  |
| Z                | T | T | T | T | T | T | T | T | T | T  | T  | T  | T  | T  | T                  | T  | T  | T  | T  | T  | T  | T  | T  | T  | T  |
|                  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15                 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |

| CP2-HB125-A2-KR |   |   |   |   |   |   |   |   |   |    |    |    |    |    | Connector Type B25 |    |    |    |    |    |    |    |    |    |    |
|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|--------------------|----|----|----|----|----|----|----|----|----|----|
| F               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |                    |    |    |    |    |    |    |    |    |    |    |
| E               | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| D               | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| C               | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| B               | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| A               | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| Z               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |                    |    |    |    |    |    |    |    |    |    |    |
|                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15                 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |

| CP2-HB125-GA2-KR |   |   |   |   |   |   |   |   |   |    |    |    |    |    | Connector Type B25 |    |    |    |    |    |    |    |    |    |    |
|------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|--------------------|----|----|----|----|----|----|----|----|----|----|
| F                | F | F | F | F | F | F | F | F | F | F  | F  | F  | F  | F  | F                  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| E                | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| D                | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| C                | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| B                | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| A                | E | E | E | E | E | E | E | E | E | E  | E  | E  | E  | E  | E                  | E  | E  | E  | E  | E  | E  | E  | E  | E  | E  |
| Z                | F | F | F | F | F | F | F | F | F | F  | F  | F  | F  | F  | F                  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
|                  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15                 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |

| Signal Contact Configuration Worksheet |   |   |   |   |   |   |   |   |   |    |    |    |    |    | Connector Type B25 |    |    |    |    |    |    |    |    |    |    |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|--------------------|----|----|----|----|----|----|----|----|----|----|
| F                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |                    |    |    |    |    |    |    |    |    |    |    |
| E                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |                    |    |    |    |    |    |    |    |    |    |    |
| D                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |                    |    |    |    |    |    |    |    |    |    |    |
| C                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |                    |    |    |    |    |    |    |    |    |    |    |
| B                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |                    |    |    |    |    |    |    |    |    |    |    |
| A                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |                    |    |    |    |    |    |    |    |    |    |    |
| Z                                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |                    |    |    |    |    |    |    |    |    |    |    |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15                 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |

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