

# GMMD DIFFERENTIAL TWINAX Modular High-Speed Micro-D Connectors



Coax and Combo Coax contact arrangements  
materials and finishes • panel cutouts

GMMD COAX AND COMBO COAX CONNECTORS

| GMMD COAX AND COMBO COAX CONTACT ARRANGEMENTS |                         |                          |                          |
|---|-------------------------|--------------------------|--------------------------|
|   |                         |                          |                          |
| <b>Contact Arrangement</b>                    | 2C                      | 4C                       | 6C                       |
| <b>Shell Size</b>                             | 9                       | 21                       | 25                       |
| <b>No. / type of contacts</b>                 | 2 X 50Ω Coax            | 4X 50Ω Coax              | 6X 50Ω Coax              |
|   |                         |                          |                          |
| <b>Contact Arrangement</b>                    | 8C                      | 16C                      |                          |
| <b>Shell Size</b>                             | 37                      | 67                       |                          |
| <b>No. / type of contacts</b>                 | 8 X 50Ω Coax            | 16X 50Ω Coax             |                          |
|   |                         |                          |                          |
| <b>Contact Arrangement</b>                    | 2C9                     | 1V9                      | 2V9                      |
| <b>Shell Size</b>                             | 21                      | 21                       | 31                       |
| <b>No. / type of contacts</b>                 | 2X 50Ω Coax,<br>9 X #24 | 1 X 75Ω Coax,<br>9 X #24 | 2 X 75Ω Coax,<br>9 X #24 |
|   |                         |                          |                          |
| <b>Contact Arrangement</b>                    |                         |                          | 4V                       |
| <b>Shell Size</b>                             |                         |                          | 21                       |
| <b>No. / type of contacts</b>                 |                         |                          | 4 X 75Ω Coax             |

| GMMD MODULAR HIGH-SPEED MICRO-D STANDARD MATERIALS AND FINISHES |   |
|---|---|
| <b>Connector Shell, Metal</b>                                   | Aluminum Alloy 6061 IAW SAE AMS-QQ-A-250/11: Plating code 2: electroless nickel IAW ASTM B733 / Plating code 5: gold plated IAW ASTM B488 over electroless nickel IAW ASTM B733-90. / Plating code 6: chem film IAW MIL-C-5541 Class 3 Stainless Steel, 300 Series: Plating Code 3: Passivated IAW SAE AMS 2700 |
| <b>#24 Insulator and organizer tray</b>                         | High-grade, high-temperature thermoplastic  |
| <b>Interfacial Seal (where applicable)</b>                      | Fluorosilicone rubber IAW MIL-R-25988   |
| <b>#24 Pin Contact (TwistPin)</b>                               | Beryllium copper, gold plated IAW ASTM B 488 Type II Class 1.27 (50 Min minimum) Code C, over nickel underplate IAW SAE AMS-QQ-N-290, class 2, (50-150 μin).  |
| <b>#24 Socket Contact</b>                                       | Phos bronze IAW ASTM 139 gold plated IAW ASTM B 488 Type II Class 1.27 (50 Min minimum) Code C, over nickel underplate IAW SAE-AMS-QQ-N-290, Class 2, (50-150 μin).   |
| <b>Twinax #30 pin contacts</b>                                  | Spring Temper Gold alloy, unplated, per ASTM B477 and ASTM B541   |
| <b>Twinax #30 socket contacts</b>                               | Gold alloy, unplated, per ASTM B477 and ASTM B541   |
| <b>Coax isolating bush</b>                                      | High-grade thermoplastic  |
| <b>Encapsulant</b>  | High-temperature potting  |
| <b>Jackscrews, Jackposts, Float Mounts</b>                      | Stainless steel, 300 series, passivated IAW SAE AMS 2700  |

| COMPLETE LIST OF CONTACT ARRANGEMENTS |            |             |            |
|---------------------------------------|------------|-------------|------------|
| 50Ω Coax                              |            | 75Ω Coax    |            |
| Arrangement                           | Shell Size | Arrangement | Shell Size |
| 1C                                    | 9          | 1V          | 9          |
| 2C                                    | 9          | 2V          | 15         |
| 4C                                    | 21         | 3V          | 21         |
| 5C                                    | 21         | 4V          | 25         |
| 6C                                    | 25         | 5V          | 31         |
| 7C                                    | 31         | 6V          | 37         |
| 8C                                    | 37         | 8V          | 51         |
| 9C                                    | 37         | 10V         | 67         |
| 12C                                   | 51         | 1V9         | 21         |
| 16C                                   | 67         | 2V9         | 25         |
| 2C9                                   | 21         | 3V9         | 31         |
| 4C9                                   | 31         | 4V9         | 37         |
| 8C9                                   | 51         | 6V9         | 51         |
| 11C9                                  | 67         | 8V9         | 67         |
| 1C15                                  | 25         | 1V15        | 25         |
| 2C15                                  | 31         | 2V15        | 31         |
| 4C15                                  | 37         | 3V15        | 37         |
| 6C15                                  | 51         | 5V15        | 51         |
| 10C15                                 | 67         | 7V15        | 67         |
| 1C21                                  | 31         | 2V21        | 37         |
| 2C21                                  | 37         | 4V21        | 51         |
| 5C21                                  | 51         | 6V21        | 67         |
| 8C21                                  | 67         | 1V25        | 37         |
| 2C25                                  | 37         | 3V25        | 51         |
| 4C25                                  | 51         | 6V25        | 67         |
| 8C25                                  | 67         | 2V31        | 51         |
| 3C31                                  | 51         | 5V31        | 67         |
| 6C31                                  | 67         | 2V37        | 51         |
| 2C37                                  | 51         | 4V37        | 67         |
| 5C37                                  | 67         | 2V51        | 67         |
| 2C51                                  | 67         |             |            |

| RECOMMENDED PANEL CUTOUT |                   |        |                  |        |                |        |
|--------------------------|-------------------|--------|------------------|--------|----------------|--------|
|                          |                   |        |                  |        |                |        |
|                          | Front Panel Mount |        | Rear Panel Mount |        |                |        |
| Layout                   | A                 | B      | C                | D      | E              | F      |
|                          | mm.               | mm.    | mm.              | mm.    | mm.            | mm.    |
|                          | ± 0.08            | ± 0.05 | ± 0.05           | ± 0.05 | + 0.13, - 0.00 | ± 0.05 |
| 9                        | 14.35             | 10.41  | 2.31             | 7.04   | 6.50           | 3.20   |
| 15                       | 18.16             | 14.22  | 2.31             | 7.04   | 6.50           | 3.20   |
| 21                       | 21.97             | 18.03  | 2.31             | 7.04   | 6.50           | 3.20   |
| 25                       | 24.51             | 20.57  | 2.31             | 7.04   | 6.50           | 3.20   |
| 31                       | 28.32             | 24.38  | 2.31             | 7.04   | 6.50           | 3.20   |
| 37                       | 32.13             | 28.19  | 2.31             | 7.04   | 6.50           | 3.20   |
| 51-2                     | 41.02             | 37.08  | 2.31             | 7.04   | 6.50           | 3.20   |
| 67                       | 51.18             | 47.19  | 2.31             | 7.04   | 6.50           | 3.20   |