

GMMD DIFFERENTIAL TWINAX Modular High-Speed Micro-D Connectors



Selection Guide - Coax and combo coax contact arrangements materials and finishes - panel cutouts

GMMD COAX AND COMBO COAX CONNECTORS

The Series GMMD is an innovative modular Micro-D connector for RF coax and high-speed differential datalink applications. The unique micro miniature design of the GMMD also accommodates standard analog signal and power contacts, making it the most versatile Micro-D rectangular in the industry. GMMD leverages RF Coax contacts with Glenair Signature Micro-D and Nano TwistPin contact inserts. GMMD is supplied as factory-terminated pigtailed, point-to-point jumpers, and SMT receptacles for easy PCB mounting.

Connector Selection Guide



GMMD-HRE / -HRPE
Horizontal PCB-mount Coax
receptacles
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**GMMD-FP / -FPE / -FR /
-FRP / -FPCC**
Coax and Combo Coax jumpers
and pigtailed - Page 78

| GMMD COAX AND COMBO COAX CONTACT ARRANGEMENTS (additional arrangements are available, consult factory) | | | | |
|---|-------------------------|--------------------------|--------------------------|--------------|
| | | | | |
| Contact Arrangement | 2C | 4C | 6C | |
| Shell Size | 9 | 21 | 25 | |
| No. / type of contacts | 2 X 50Ω Coax | 4X 50Ω Coax | 6X 50Ω Coax | |
| | | | | |
| Contact Arrangement | 8C | | 16C | |
| Shell Size | 37 | | 67 | |
| No. / type of contacts | 8 X 50Ω Coax | | 16X 50Ω Coax | |
| | | | | |
| Contact Arrangement | 2C9 | 1V9 | 2V9 | 4V |
| Shell Size | 21 | 21 | 31 | 21 |
| No. / type of contacts | 2X 50Ω Coax, 9 X #24 | 1 X 75Ω Coax, 9 X #24 | 2 X 75Ω Coax, 9 X #24 | 4 X 75Ω Coax |

| 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 | | |

| GMMD MODULAR HIGH-SPEED MICRO-D STANDARD MATERIALS AND FINISHES | |
|---|--|
| Connector Shell, Metal | 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 |
| #24 Insulator and organizer tray | High-grade, high-temperature thermoplastic |
| Interfacial Seal (where applicable) | Fluorosilicone rubber IAW MIL-R-25988 |
| #24 Pin Contact (TwistPin) | 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). |
| #24 Socket Contact | 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). |
| Coax isolating bush | High-grade thermoplastic |
| Encapsulant | High-temperature potting |
| Jackscrows, Jackposts, Float Mounts | Stainless steel, 300 series, passivated IAW SAE AMS 2700 |

| RECOMMENDED PANEL CUTOUT | | | | | | | | |
|--------------------------|------------------|--------|---------------|---------------|---------------|---------------|-----------------------|---------------|
| Layout Diagram | | Layout | A | B | C | D | E | F |
| Front Panel Mount | Rear Panel Mount | | mm. ± 0.08 | mm. ± 0.05 | mm. ± 0.05 | mm. ± 0.05 | mm. + 0.13, - 0.00 | mm. ± 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 |