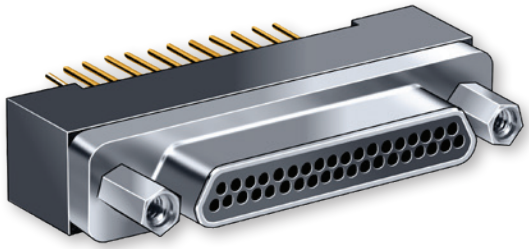
# Micro-D GMR7580
## Vertical Mount
### Printed Circuit Board Connectors





**Save Space On Your Circuit Board** – These Micro-D connectors feature .075 X .075 inch terminal spacing. Glenair's GMR7580 offers significant size and weight savings compared to traditional .100" pitch connectors.

**High Performance** – GMR7580 connectors meet the performance requirements of MIL-DTL-83513. Gold-plated TwistPin contacts assure best performance.

## How To Order GMR7580 Vertical Mount Connectors

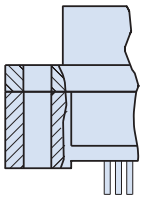
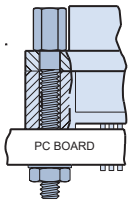
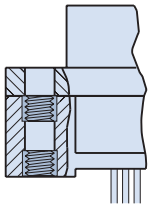
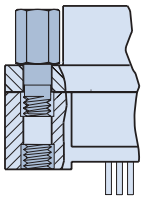
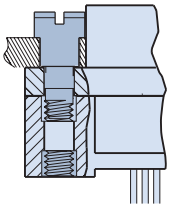
| Sample Part Number | GMR7580 | -31 | S | 2 | B | NN | -513 |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| **Series** | **GMR7580** - Micro-D Vertical Mount Connector |
| **Contact Layout** | **9**, **15**, **21**, **25**, **31**, **37**, **51**, **100** (See Table II) |
| **Contact Type** | **P** - Pin **S** - Socket |
| **Tail Length Inches (mm)** | **1** - .109" (2.76) **2** - .150" (3.81) **3** - .190" (4.83)<br>**4** - .250" (6.35) **5** - Staggered Tail Length<br>Length in Inches ± .015 (0.38) |
| **Shell Plating Finish** | Aluminum Shell<br>**A** - Cadmium **B** - Nickel **C** - Allochrome<br>**D** - Black Anodize **E** - Gold<br>Stainless Steel Shell<br>**F** - Passivated |
| **Hardware Option** | **NN** - No Jackpost, No Threaded Insert<br>**PN** - Extended Jackpost For .062" (1.6) PCB, No Threaded Insert<br>**RN** - Extended Jackpost For .196" (5.0) PCB, No Threaded Insert<br>**NU** - Threaded insert only, no jackposts<br>**NM** - Metric Threaded Insert Only, No Jackposts<br>**SU** - Short Jackpost and Threaded Insert<br>**SM** - Short Jackpost and Metric Threaded Insert<br>(See Table I) |
| **Gold-Plated Terminal Mod Code** | These connectors are solder-dipped in 60/40 tin-lead solder.<br>To delete the solder-dip and change to gold-plated terminals, add code **-513** |

**Rear Panel Mount Jackposts and Threaded Inserts**

| UN Threads | Metric Threads | Panel Thickness |
|---|---|---|
| **TU** | **TM** | .094" (2.4) |
| **VU** | **VM** | .062" (1.6) |
| **WU** | **WM** | .047" (1.2) |
| **XU** | **XM** | .031" (0.8) |
| **YU** | **YM** | .023" (0.6) |

## Table I: Jackpost Options

| NN | PN and RN | NU, NM | SU, SM | TU, VU, WU, XU, YU<br>TM, VM, WM, XM, YM |
|---|---|---|---|---|
|  |   |  |  |  |
| Thru-Hole | Jackpost Kit<br>PN – .062 (1.6) PCB<br>RN – .196 (5.0) PCB | Threaded Inserts | Jackpost With Threaded Insert | Jackpost for Rear Panel Mounting |

© 2013 Glenair, Inc. 

GLENAIR, INC. • 1211 AIR WAY • GLENDALE, CA 91201-2497 • 818-247-6000 • FAX 818-500-9912
www.glenair.com E-Mail: sales@glenair.com

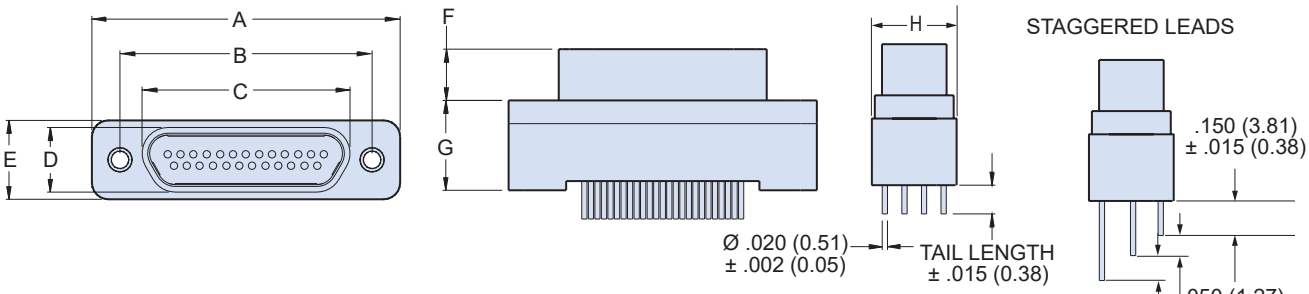


Downloaded from Arrow.com.

# Micro-D GMR7580
## Vertical Mount
### Printed Circuit Board Connectors



## GMR7580 Connector Dimensions




SIZES 9 THRU 51 MOUNTING HOLE ARE .088/096 (2.24/2.39)
SIZE 100 MOUNTING HOLE IS .145/.151 (3.68/3.81)

SIZES 9 THRU 51 THREAD SIZE IS #2-56 UNC OR M2
SIZE 100 THREAD SIZE IS #4-40 OR M3

| Layout | A Max. | | B | | C Max. | | D Max. | | E Max. | | F | | G Max. | | H Max. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | In. | mm. | In . ± .005 | mm. ± 0.13 | In . | mm. | In . | mm. | In . | mm. | In . ± .003 | mm. ± 0.08 | In . | mm. | In . | mm. |
| 9P | .785 | 19.94 | .565 | 14.35 | .335 | 8.51 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .355 | 9.02 | .310 | 7.87 |
| 9S | .785 | 19.94 | .565 | 14.35 | .400 | 10.16 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .355 | 9.02 | .310 | 7.87 |
| 15P | .935 | 23.75 | .715 | 18.16 | .485 | 12.32 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .355 | 9.02 | .310 | 7.87 |
| 15S | .935 | 23.75 | .715 | 18.16 | .550 | 13.97 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .355 | 9.02 | .310 | 7.87 |
| 21P | 1.085 | 27.56 | .865 | 21.97 | .635 | 16.13 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .355 | 9.02 | .310 | 7.87 |
| 21S | 1.085 | 27.56 | .865 | 21.97 | .700 | 17.78 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .355 | 9.02 | .310 | 7.87 |
| 25P | 1.185 | 30.10 | .965 | 24.51 | .735 | 18.67 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .355 | 9.02 | .310 | 7.87 |
| 25S | 1.185 | 30.10 | .965 | 24.51 | .800 | 20.32 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .355 | 9.02 | .310 | 7.87 |
| 31P | 1.335 | 33.91 | 1.115 | 28.32 | .885 | 22.48 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .355 | 9.02 | .310 | 7.87 |
| 31S | 1.335 | 33.91 | 1.115 | 28.32 | .950 | 24.13 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .355 | 9.02 | .310 | 7.87 |
| 37P | 1.485 | 37.72 | 1.265 | 32.13 | 1.035 | 26.29 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .355 | 9.02 | .310 | 7.87 |
| 37S | 1.485 | 37.72 | 1.265 | 32.13 | 1.100 | 27.94 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .355 | 9.02 | .310 | 7.87 |
| 51P | 1.435 | 36.45 | 1.215 | 30.86 | .985 | 25.02 | .228 | 5.79 | .351 | 8.92 | .183 | 4.65 | .355 | 9.02 | .351 | 8.92 |
| 51S | 1.435 | 36.45 | 1.215 | 30.86 | 1.050 | 26.67 | .296 | 7.52 | .351 | 8.92 | .195 | 4.95 | .355 | 9.02 | .351 | 8.92 |
| 100P | 2.170 | 55.12 | 1.800 | 45.72 | 1.384 | 35.15 | .271 | 6.88 | .470 | 11.94 | .183 | 4.65 | .430 | 10.92 | .470 | 11.94 |
| 100S | 2.170 | 55.12 | 1.800 | 45.72 | 1.451 | 36.86 | .333 | 8.46 | .470 | 11.94 | .195 | 4.95 | .430 | 10.92 | .470 | 11.94 |

| Performance Specifications | |
|---|---|
| Current Rating | 3 AMP |
| DWV | 600 VAC Sea level |
| Insulation Resistance | 5000 Megohms Minimum |
| Contact Resistance | 8 Milliohms Maximum |
| Low Level Contact Resist. | 32 Milliohms Maximum |
| Magnetic Permeability | 2 µ Maximum |
| Operating Temperature | -55° C. to +150° C. |
| Shock, Vibration | 50 g., 20g. |
| Mating Force | (10 Ounces) X (# of Contacts) |

| Materials and Finishes | |
|---|---|
| Connector Shell | Aluminum Alloy 6061 or Stainless Steel, 300 Series, passivated. See Ordering Info for Plating Options |
| Insulator, Tray | Liquid Crystal Polymer (LCP) Polyphenylene Sulfide (PPS) |
| Interfacial Seal | Fluorosilicone Rubber, Blue |
| Pin Contact | Copper Alloy, Gold over Nickel Plating |
| Socket Contact | Copper Alloy, Gold Over Nickel Plating |
| PCB Terminals | Gold Plated Copper Alloy, Solder Dipped |
| Hardware | 300 Series Stainless Steel |
| Encapsulant | Epoxy Resin Hysol EE4215 |

© 2013 Glenair, Inc.


GLENAIR, INC. • 1211 AIR WAY • GLENDALE, CA 91201-2497 • 818-247-6000 • FAX 818-500-9912
www.glenair.com E-Mail: sales@glenair.com

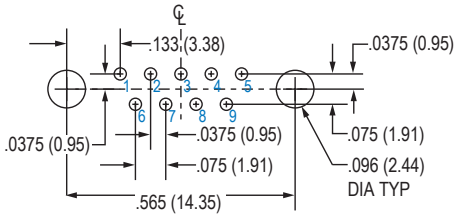


Downloaded from Arrow.com.

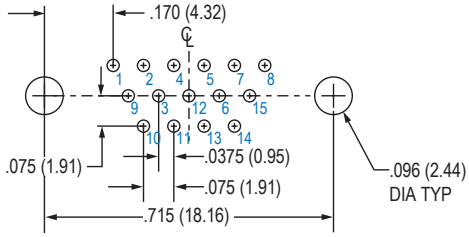
# Micro-D GMR7580
## Vertical Mount
### Printed Circuit Board Connectors

## GMR7580 Connector PCB Layouts – Pin Connectors

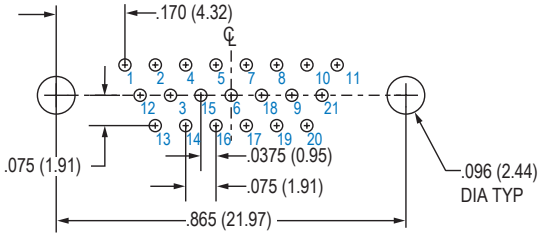
**Patterns shown are for connector mounting side of PC board.**



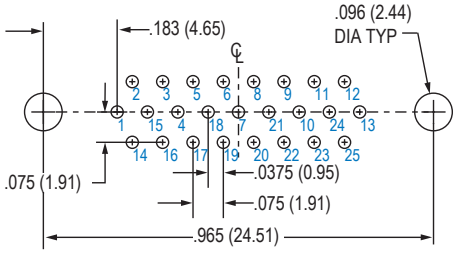

**9 PIN**



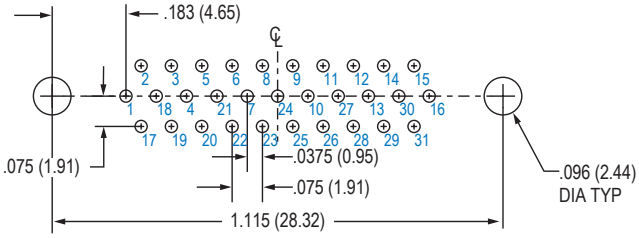

**15 PIN**



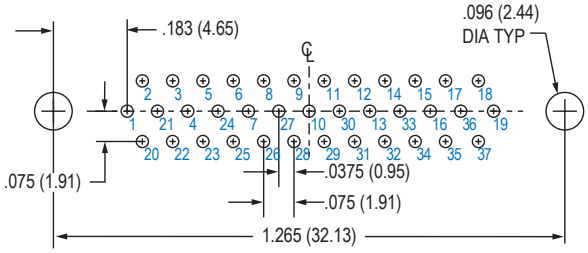

**21 PIN**



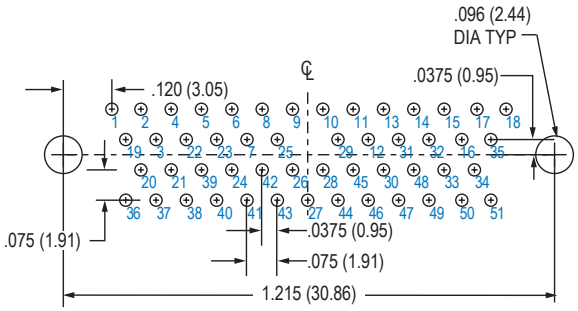

**25 PIN**



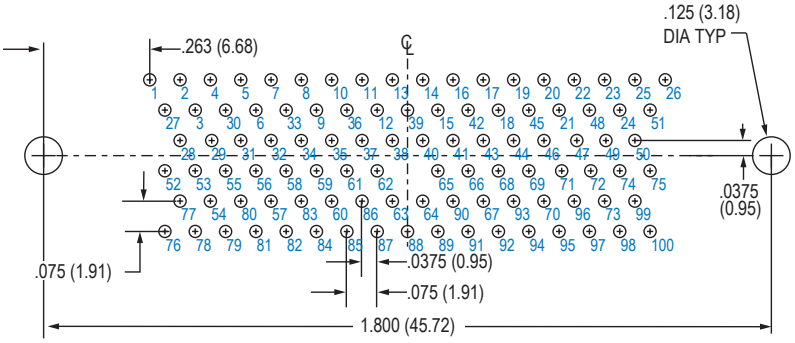

**31 PIN**




**37 PIN**




**51 PIN**




**100 PIN**

© 2013 Glenair, Inc.

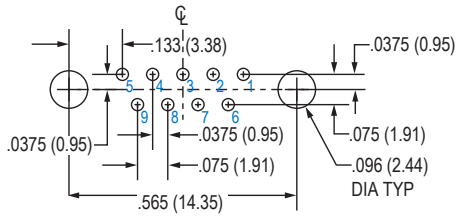

**GLENAIR, INC. • 1211 AIR WAY • GLENDALE, CA 91201-2497 • 818-247-6000 • FAX 818-500-9912**
**www.glenair.com** **E-Mail: sales@glenair.com**



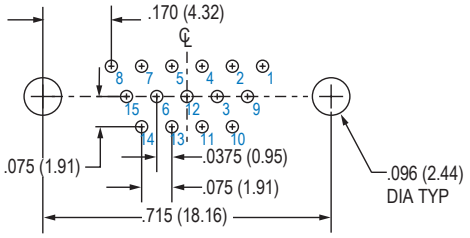
Downloaded from Arrow.com.

# GMR7580 Connector PCB Layouts – Socket Connectors

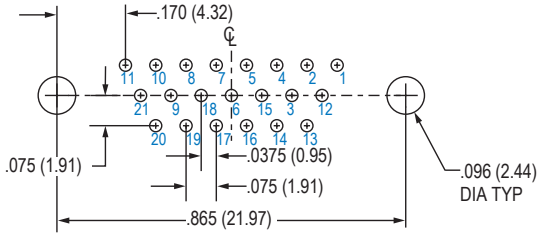
**Patterns shown are for connector mounting side of PC board.**



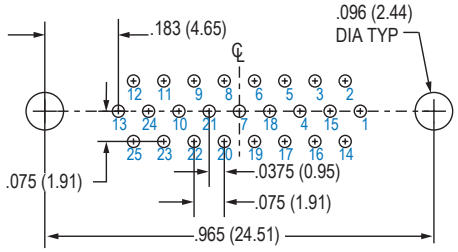

**9 SOCKET**



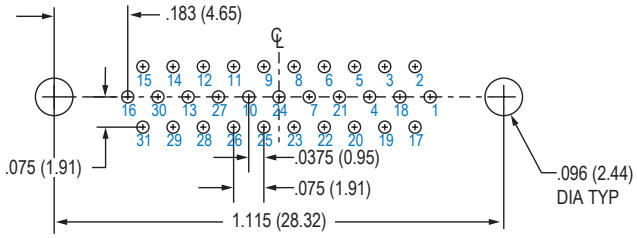

**15 SOCKET**



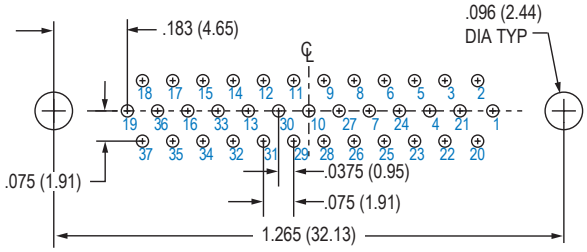

**21 SOCKET**



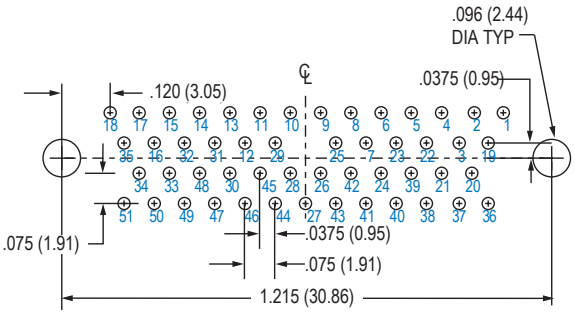

**25 SOCKET**



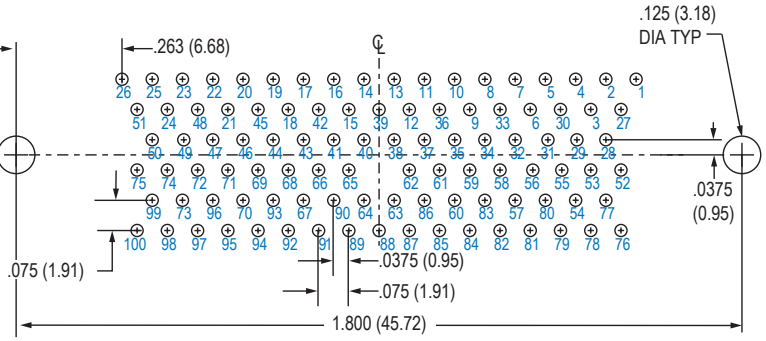

**31 SOCKET**




**37 SOCKET**




**51 SOCKET**



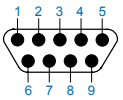

**100 SOCKET**



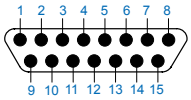
Downloaded from Arrow.com.

# Micro-D Contact Arrangements

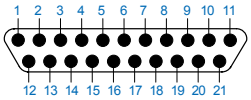
## Face View Pin Connector – Micro-D Contact Arrangements



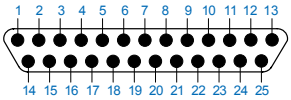

**9 pin**



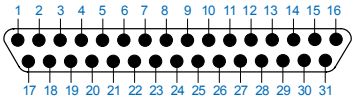

**15 pin**



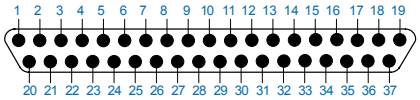

**21 pin**



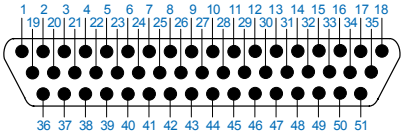

**25 pin**



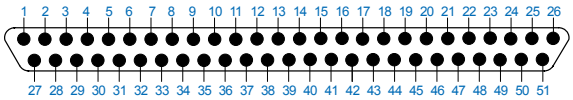

**31 pin**



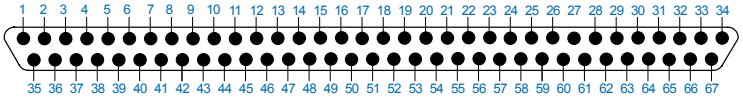

**37 pin**



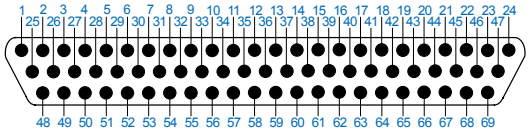

**51 pin**



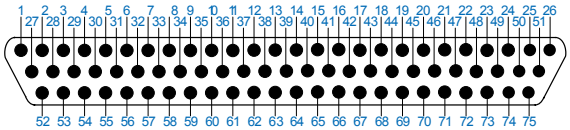

**51 pin (special 2 row)**



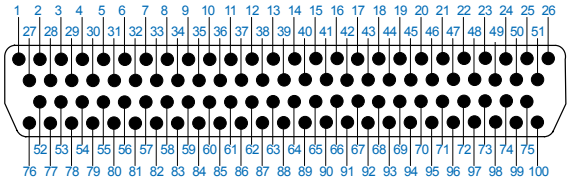

**67 pin**



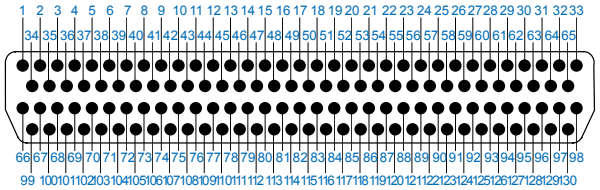

**69 pin**




**75 pin**




**100 pin**



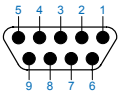

**130 pin**



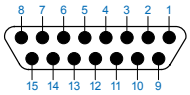
Downloaded from Arrow.com.

# Micro-D Contact Arrangements

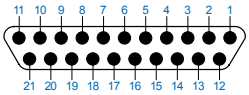
## Face View Socket Connector – Micro-D Contact Arrangements



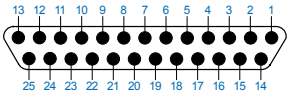

**9 socket**



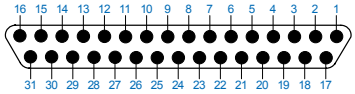

**15 socket**



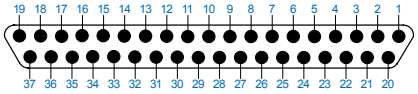

**21 socket**



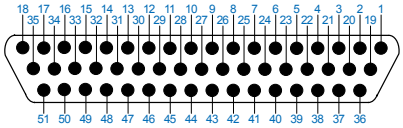

**25 socket**



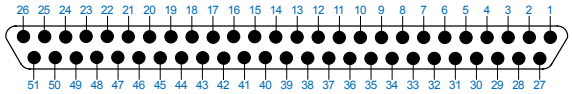

**31 socket**



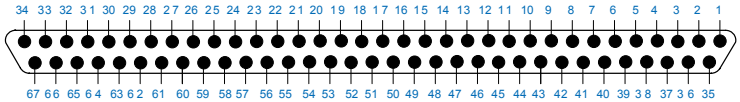

**37 socket**



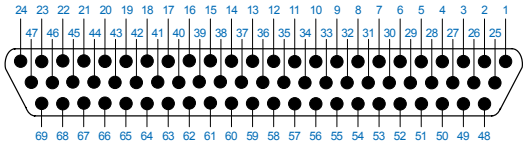

**51 socket**



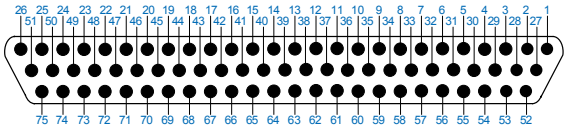

**51 socket (special 2 row)**



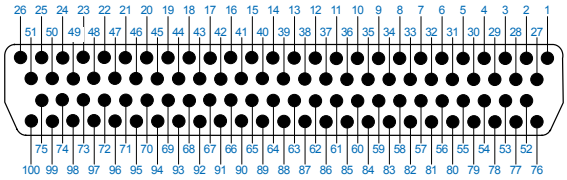

**67 socket**



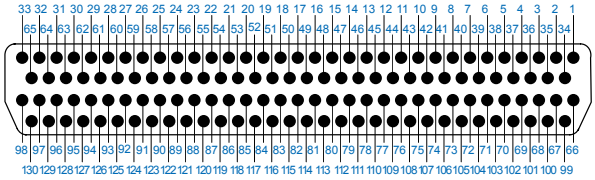

**69 socket**




**75 socket**




**100 socket**




**130 socket**



Downloaded from Arrow.com.