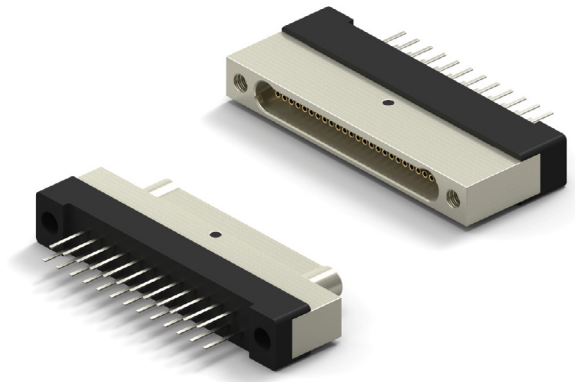


CIRCUIT CONNECTOR VERTICAL








- Metal Shell Connector
- Plated Thru Hole .050 x .050 (Style 6)
- 1 Piece Contact
- Flat Tail Termination
- Operating Temperature -50° C to 200° C
- 9 to 51 Contacts



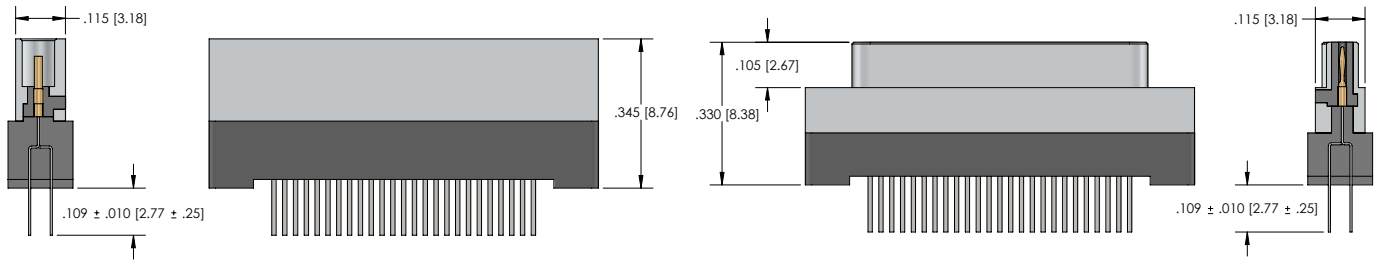
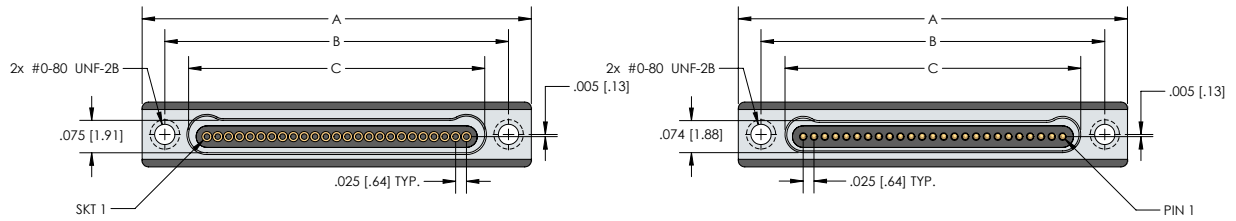
NANO D – PID 139

HOW TO ORDER

* Indicates preferred standard ** Consult factory for other plating options

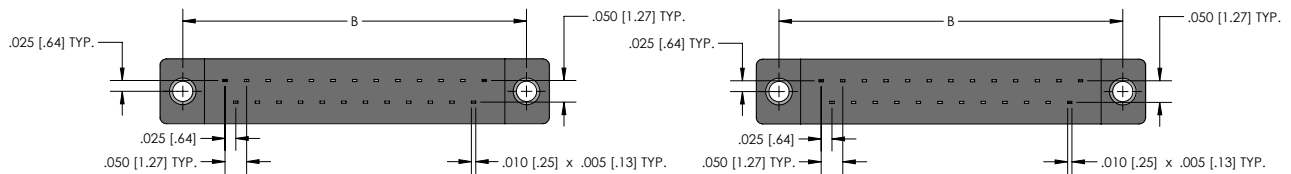
| CN | M | 6 | L | 25 | -1 | P | Ø7 | 1 | -SØ1 | |
|---------|----------------|-----------|----------|----------------|----------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|----------------------------------------------|
| Series | Style | Insulator | Contacts | Insulator Type | Contact Gender | Hardware | Lead Finish | Finish** | Temp Range | |
| CN=Nano | M= Metal Shell | Style=6 | L=LCP | Ø9 | 1= Single Row | P=Male/Pin (Plug Side) | Ø7=Threaded Hole | 1= Tin plated (6Ø/4Ø) | Blank= Cadmium | *Bank = 125C |
| | | | 15 | | |  |  | 2= Gold plated (RoHS) |  | HT = 200C Supplied with Gold Plated Leads |
| | | | 21 | | | S=Female/Socket (Receptacle Side) | | | *SØ1= Nickel | |
| | | | 25 | | |  | | |  | |
| | | | 31 | | | | | | SØ3 = Black Anodize | |
| | | | 37 | | | | | |  | |
| | | | 51 | | | | | | SØ9 = Stainless | |
| | | | | | | | | |  | |

DIMENSIONS



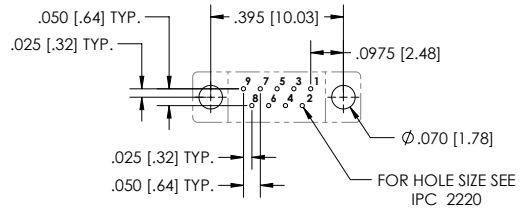
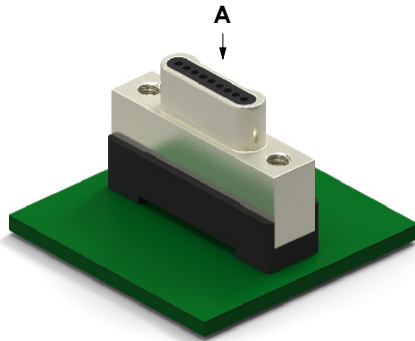
RECEPTACLE (SOCKETS)

PLUG (PINS)

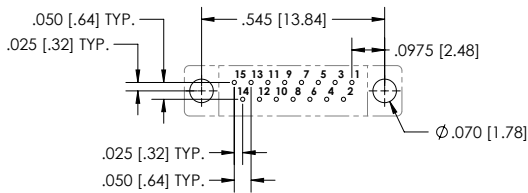


| CNM6 SERIES (SINGLE ROW) | | | | | |
|--------------------------|---------------|---------------|---------------|---------------|---------------|
| Size | A | B | Plug C | Receptacle | D |
| 9 | .500 [12.70] | .395 [10.03] | .284 [7.21] | .285 [7.24] | .300 [7.62] |
| 15 | .650 [16.51] | .545 [13.84] | .434 [11.02] | .435 [11.05] | .450 [11.43] |
| 21 | .800 [20.32] | .695 [17.65] | .584 [14.83] | .585 [14.86] | .600 [15.24] |
| 25 | .900 [22.86] | .795 [20.19] | .684 [17.37] | .685 [17.40] | .700 [17.78] |
| 31 | 1.050 [26.67] | .945 [24.00] | .834 [21.18] | .835 [21.21] | .850 [21.59] |
| 37 | 1.200 [30.48] | 1.095 [27.81] | .984 [24.99] | .985 [25.02] | 1.000 [25.40] |
| 51 | 1.550 [39.37] | 1.445 [36.70] | 1.334 [33.88] | 1.335 [33.91] | 1.350 [34.29] |

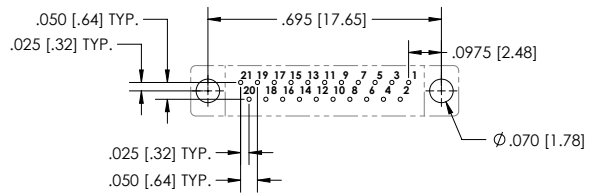
CIRCUIT CONNECTOR VERTICAL PCB LAYOUT MALE



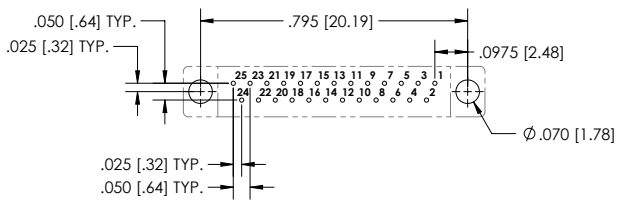
SIZE 9 - VIEW A



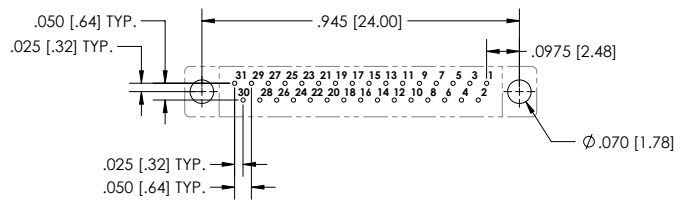
SIZE 15 - VIEW A



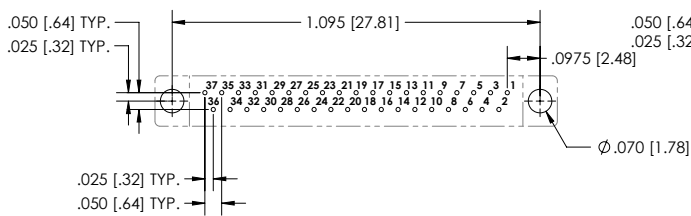
SIZE 21 - VIEW A



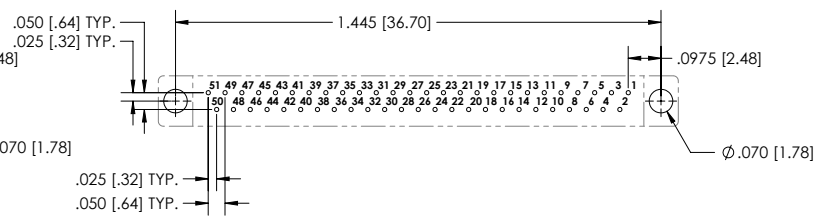
SIZE 25 - VIEW A



SIZE 31 - VIEW A



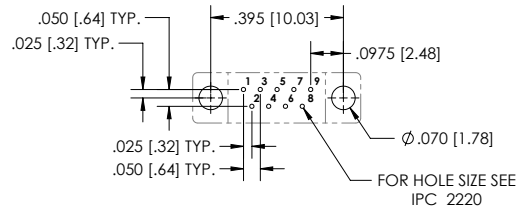
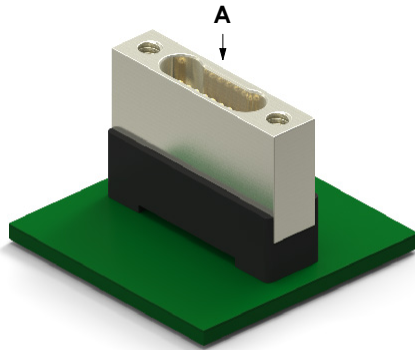
SIZE 37 - VIEW A



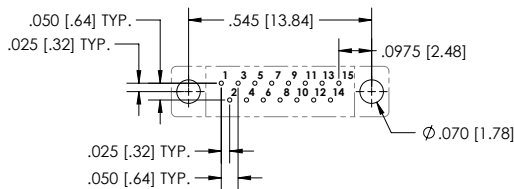
SIZE 51 - VIEW A

NANO D – PID 139

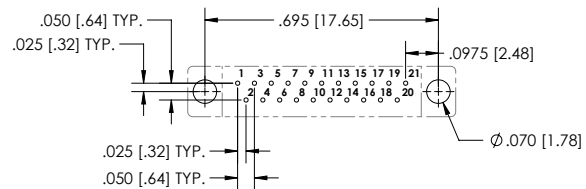
CIRCUIT CONNECTOR VERTICAL PCB LAYOUT FEMALE



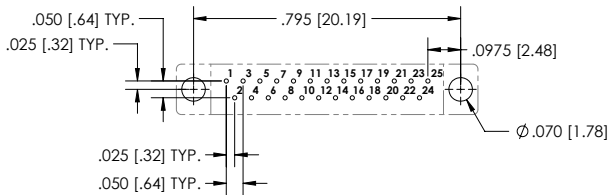
SIZE 9 - VIEW A



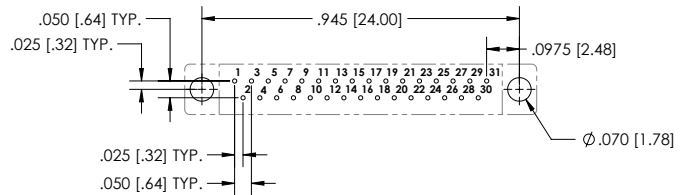
SIZE 15 - VIEW A



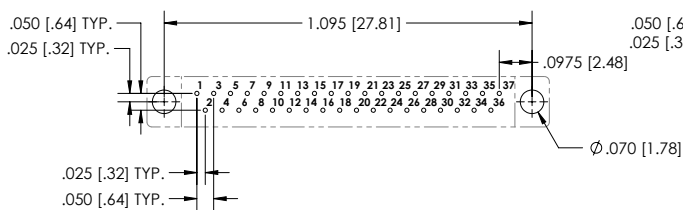
SIZE 21 - VIEW A



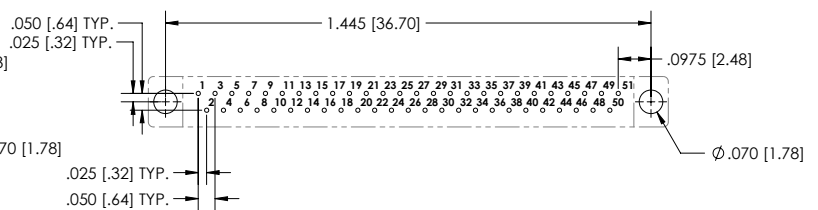
SIZE 25 - VIEW A



SIZE 31 - VIEW A



SIZE 37 - VIEW A



SIZE 51 - VIEW A

NANO-D SERIES CIRCUIT VERTICAL SINGLE ROW METAL SHELL PERFORMANCE DATA, MATERIALS AND FINISHES

PERFORMANCE DATA

| 133-E | ELECTRICAL |
|-----------------------------------|----------------------------------------------|
| CONTACT RESISTANCE: | 0.033 mΩ max.@ 1.0 A |
| CURRENT RATING (SIGNAL CONTACTS): | 1.0 A max. |
| DIELECTRIC WITHSTANDING VOLTAGE: | 250 VAC at sea level , 100 VAC at 70,000 ft. |
| INSULATION RESISTANCE: | 5,000 MΩ min. |

| 123-M | MECHANICAL |
|---------------------------|-----------------------------------------------------------------------------------------------------|
| CONTACT ENGAGING FORCE: | 5 oz max. (Contact average is 2 oz.) |
| CONTACT SEPARATING FORCE: | 0.4 oz. min. |
| CONNECTOR MATING FORCE: | 7 oz. x number of contacts max. |
| CONNECTOR UNMATING FORCE: | 7 oz. x number of contacts max. |
| VIBRATION: | No damage or interruption detected (one microsecond sensitivity) EIA-364-28 Condition IV |
| SHOCK: | No damage or interruption detected (one microsecond sensitivity) EIA-364-28 Condition IV |
| DURABILITY: | No mechanical or electrical defects after 200 matings. |
| SALT SPRAY: | No exposure of base metal or loss of performance after 96 hours for both Nickel and Cadmium plating |

MATERIALS AND FINISHES

| 139 -M&F | MATERIALS AND FINISHES |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pin Contacts | Pins: BeCu alloy strip per ASTM-B-194 |
| Socket Contacts | Sockets: BeCu per ASTM-B-194 |
| Contact Plating | Gold plate per ASTM B488, or SAE AMS 2422 |
| Metal Shells | Aluminum alloy per SAE-AMS-QQ-A-200/8, Type 6061-T6, with Electroless Nickel SAE AMS2404, Class 3 or 4 Aluminum alloy per SAE-AMS-QQ-A-200/8, Type 6061-T6, with Cadmium Plating per SAE-AMS-QQ-P-416, Type II, Class 1 Aluminum alloy per SAE-AMS-QQ-A-200/8, Type 6061-T6, with Black Anodize Plating per MIL-A-8625, Type III, Class 2 Stainless Steel per ASTM A582 |
| Backshell | LCP (Liquid Crystal Polymer) GLCP-30F or PPS Per MIL-M-24519 GST-40F |
| Molded Insulator Into Metal Housing/ Lead Organizer | LCP (Liquid Crystal Polymer) GLCP-30F or PPS Per MIL-M-24519 GST-40F |