## Dual Row Nano Strip

## STRAIGHT TAIL (TYPE DD) ORDERING GUIDE

SERIES \# OF CONTACTS TERMINATION TYPE COMMON OPTIONS


NPD 02-80
PIN CONNECTOR



G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES


M MOUNTING HOLE


HT HIGH TEMP

RoHS RoHS COMPLIANT



NPD-46-DD-GS


NSD-48-DD-S-RoHS

## Dual Row Nano Strip

NPD-DD LAYOUT


SUGGESTED HOLE PATTERN



## DIMENSIONS FOR "A"

To determine connector length " A ":
Add the total number of contacts in one row
Add 1 contact cavity for each guide post hole in the same row
Total contact cavities in a single row
Multiply the number of contact cavities minus 1 by $.025^{\prime \prime}$
Add fixed end length constant
Total Length (Dimension A)

Notes: Maximum length .615"(15.62). Maximum number of contact cavities is 80 . Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

## DIMENSIONS FOR "B"

To determine pad pattern layout length " $B$ ":
Multiply the number of contacts in one row minus 1 by $.025^{\prime \prime}$
If hardware features are within the contact area:
Add $.025^{\prime \prime}$ for each guide post hole in the same row
Total Length (Dimension B)

Notes: Maximum length $.575^{\prime \prime}$ (14.61). Maximum number of contact cavities is 80 . Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [ ] are in Millimeters unless otherwise noted and are for reference only.

## Dual Row Nano Strip

## NSD-DD LAYOUT



## DIMENSIONS FOR "A"

To determine connector length " $A$ ":

| Add the total number of contacts in one row |
| :--- |
| Add 1 contact cavity for each guide post hole in the same row |
| Total contact cavities in a single row |
| Multiply the number of contact cavities minus 1 by $.025^{\prime \prime}$ |
| Add fixed end length constant |
| Total Length (Dimension A) |

Notes: Maximum length .615"(15.62). Maximum number of contact cavities is 80 . Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

## DIMENSIONS FOR "B"

To determine pad pattern layout length " B ":
Multiply the total number of contacts in one row minus 1 by $.025^{\prime \prime}$
If hardware features are within the contact area:
Add $.025^{\prime \prime}$ for each guide post hole in the same row
Total Length (Dimension B)

Notes: Maximum length $.575^{\prime \prime}(14.61)$. Maximum number of contact cavities is 80 . Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [ ] are in Millimeters unless otherwise noted and are for reference only.

## Dual Row Nano Strip

## STRAIGHT TAIL (TYPE DD)

Dual Row Nano Strip connectors are configured with simple straight tails (Integral and Crimped). Suitable for vertical thru-hole mounting to fine pitched flex circuits, these ruggedized Nano connectors are designed on .025 " (. 64 mm ) centerlines. Straight tails are commonly used in a variety of wrap termination such as neuroscience related applications. These connectors feature Omnetics' gold plated Flex Pin contact system that conforms to the requirements of MIL-DTL-32139. These connectors are available in standard sizes ranging from 2 through 80 positions as well as custom configurations.

Flex design and installation service is also available from Omnetics. Please contact us for more information.


## ELECTRO-MECHANICAL SPECS

- Durability:

2000 Cycles

- Temperature: $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}\left(200^{\circ} \mathrm{C} \mathrm{w} / \mathrm{HTE}\right)$
- Current rating:
- Voltage Rating (DWV):
- Insulation Resistance: $\qquad$
- Shock:
- Vibration: 1 AMP per contact
- Thermal Vacuum Outgassing:

250 VAC RMS Sea Level
5,000 Megohms min @ 100 VDC 100 G's discontinuity < 10 nanoseconds

- Contact Resistance: 20 G's discontinuity < 10 nanoseconds
- Mating/Unmating Force: NASA SP-R-0022
71 Milliohms max (71 mV max @ 1 AMP)
$2.5 \mathrm{oz}(71 \mathrm{~g})$ typical per contact


## MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination:
- Standard Pin PCB Tail Termination:
- RoHS Pin PCB Tail Termination:
- RoHS Socket PCB Tail Termination:
- Insulator:
- Pin:
- Socket:
- Encapsulant:

Soldered per J-STD-006 (Non-RoHS)
Solder plated per AMS-P-81728 (Non-RoHS)
Hard gold plated per ASTM B488
Hard gold plated per ASTM B488
Polyphenylene Sulfide per MIL-M-24519
Gold Plated BeCu
Gold Plated Copper Alloy
Epoxy

