## Single Row Nano Strip

## HORIZONTAL SMT (TYPE AA) ORDERING GUIDE



EXAMPLES:


## Single Row Nano Strip

## NPS-AA LAYOUT





## DIMENSIONS FOR "A"

To determine connector length " $A$ ":
Add the total number of contacts
Add 1 contact cavity for each guide post hole
Add 3 contact cavities for each mounting hole
Total contact cavities
Multiply the number of contact cavities minus 1 by $.025^{\prime \prime}$
Add fixed end length constant
Total Length (Dimension A)

Notes: Maximum length @ .050"thick $=1.015^{\prime \prime}$ (25.78). Maximum number of contact cavities is 60 . Maximum length @ .060" thick = $1.515^{\prime \prime}$ (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting 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 contact cavities minus 1 by $.025^{\prime \prime}$
If hardware features are within the contact area:
Add $.025^{\prime \prime}$ (1 contact cavity) for each guide post hole
Add . $075^{\prime \prime}$ (3 contact cavities) for each mounting hole
Total Length (Dimension B)

Notes: Maximum pattern length @ .050" thick is $.975^{\prime \prime}$ (24.76).
Maximum pattern length @ .060" thick is $1.475^{\prime \prime}$ (37.46). Add .050 " from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole, .050 " dimension must be adjusted).

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

## Single Row Nano Strip

NSS-AA LAYOUT


## DIMENSIONS FOR "A"

To determine connector length " $A$ ":

| Add the total number of contacts |  |
| :--- | :--- |
| Add 1 contact cavity for each guide post hole | - |
| Add 3 contact cavities for each mounting hole | - |
| Total contact cavities | - |
| Multiply the number of contact cavities minus 1 by $.025^{\prime \prime}$ | $-.040^{\prime \prime}$ |
| Add fixed end length constant |  |
| Total Length (Dimension A) |  |

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60 . Maximum length @ . $060^{\prime \prime}$ thick $=1.515^{\prime \prime}$ (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting 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 contact cavities minus 1 by $.025^{\prime \prime}$
If hardware features are within the contact area:
Add $.025^{\prime \prime}$ (1 contact cavity) for each guide post hole
Total Length (Dimension B)

Notes: Maximum pattern length @ .050" thick is .975" (24.76).
Maximum pattern length @ .060" thick is $1.475^{\prime \prime}(37.46)$.

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

## Single Row Nano Strip

HORIZONTAL SMT (TYPE AA)

Single Row Horizontal Nano Strip connectors offer an extremely low profile package that is well suited for pick and place methods. They have a very tight pitch of $.025^{\prime \prime}$ ( 64 mm ) centerlines. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system, conforming to the requirements of MIL-DTL-32139. These durable lightweight connectors are perfect for the most demanding applications.

These connectors are available in standard sizes ranging from 2 to 60 positions, as well as custom configurations.


## ELECTRO-MECHANICAL SPECS

- Durability: 2000 Cycles
- Temperature: $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}\left(200^{\circ} \mathrm{C}\right.$ w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance:

71 Milliohms max (71 mV max @ 1 AMP)

- Mating/Unmating Force:
$2.5 \mathrm{oz}(71 \mathrm{~g})$ 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

