# OMNETICS 

CONNECTOR CORPORATION


## MICRO \& NANO STRIP CONNECTORS



# Micro Strip Picture Index 

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## Dual Row Micro Strip

## HORIZONTAL SMT (TYPE AA)

Horizontal SMT Micro Strip connectors offer an extremely low profile package that is well suited to pick and place methods. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL-83513. These rugged light weight connectors are suitable for the most demanding applications. Available with fixing/ retention jack screws as well as mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations.


ELECTRO-MECHANICAL SPECS

- Durability:
- Temperature: 2000 Cycles
- Current rating:
- Voltage Rating (DWV):
- Insulation Resistance:
- Shock:
- Vibration:
- Thermal Vacuum Outgassing:
- Contact Resistance:
- Mating/Unmating Force:
$-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}\left(200^{\circ} \mathrm{C}\right.$ w/HTE)
3 AMPs max per contact
600 VAC RMS Sea Level
5000 Megohms min @ 500 VDC
50 g's discontinuity < 1 microsecond 20 g's discontinuity < 1 microsecond NASA SP-R-0022
26 Milliohms ( 65 mV max @ 2.5 amp ) 3 oz (85 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

## Dual Row Micro Strip

## DRP-AA LAYOUT



## $\downarrow \varepsilon$





## DIMENSIONS FOR "A"

To determine connector length " $A$ ":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same 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 $.050^{\prime \prime}$
Add .150" for each mounting hole
Add .100 " for each screw receptacle
Add fixed end length constant
Total Length (Dimension A)

Notes: Maximum length $1.85^{\prime \prime}$ (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

## DIMENSIONS FOR"B"

To determine pad pattern layout length " B ":
Multiply the number of contact cavities in one row minus 1 by $.050^{\prime \prime}$
If hardware features are within the contact area:
Add $.050^{\prime \prime}$ for each latch
Add .050 " for each guide post hole
Add .100 " for each screw receptacle
Total Length (Dimension B)

Notes: Maximum length $1.55^{\prime \prime}$ (39.37). Add $.100^{\prime \prime}$ from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100 " dimension must be adjusted).

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

## Dual Row Micro Strip

DRS-AA LAYOUT



## DIMENSIONS FOR "A"

To determine connector length " $A$ ":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same 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 $.050^{\prime \prime}$
Add .150 " for each mounting hole
Add .100 " for each screw receptacle
Add fixed end length constant
Total Length (Dimension A )

Notes: Maximum length 1.85 " (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

## DIMENSIONS FOR "B"

To determine pad pattern layout length " $B$ ":
Multiply the number of contact cavities in one row minus 1 by $.050^{\prime \prime}$ $\qquad$
If hardware features are within the contact area:
Add $.050^{\prime \prime}$ for each latch
Add .050 " for each guide post hole
Add . 100" for each screw receptacle
Total Length (Dimension B)

Notes: Maximum length $1.55^{\prime \prime}$ (39.37). Add .100 " from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100 " dimension must be adjusted).

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

## Dual Row Micro Strip

HORIZONTAL SMT (TYPE AA) ORDERING GUIDE


# Dual Row Micro Strip 

STRAIGHT TAIL (TYPE DD)

The Dual Row .050" Micro Strip connectors are configured with simple straight tails (Integral or Crimped). Suitable for vertical thru-hole mounting to fine pitched flex circuits. The straight solid tails are also commonly used in ultra fine wrap terminations, such as electrophysiology. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. Available with fixing/retention jack screws as well as mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 64 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:
- Temperature:
- Current rating:
- Voltage Rating (DWV):
- Insulation Resistance:
- Shock:
- Vibration:
- Thermal Vacuum Outgassing:
- Contact Resistance:
- Mating/Unmating Force:

2000 Cycles
$-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}\left(200^{\circ} \mathrm{C}\right.$ w/HTE)
3 AMPs max per contact
600 VAC RMS Sea Level
5000 Megohms min @ 500 VDC
50 g's discontinuity < 1 microsecond 20 g's discontinuity < 1 microsecond NASA SP-R-0022
26 Milliohms (65 mV max @ 2.5 amp ) 3 oz (85 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

## Dual Row Micro Strip

## DRP-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 latch in the same 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 .050 "
Add .150" for each mounting hole
Add .100 " for each screw receptacle
Add fixed end length constant
Total Length (Dimension A)

Notes: Maximum length 1.85 " (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

## DIMENSIONS FOR "B"

To determine pad pattern layout length " B ":
Multiply the number of contact cavities in one row minus 1 by $.050^{\prime \prime}$
If hardware features are within the contact area:
Add $.050^{\prime \prime}$ for each latch
Add . 050 " for each guide post hole
Add . 100 " for each screw receptacle
Total Length (Dimension B)

Notes: Maximum length 1.55 " (39.37). Add $.100^{\prime \prime}$ from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100 " dimension must be adjusted).

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

## Dual Row Micro Strip

DRS-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 latch in the same 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 $.050^{\prime \prime}$
Add .150 "for each mounting hole
Add $.100^{\prime \prime}$ for each screw receptacle
Add fixed end length constant
Total Length (Dimension A )

Notes: Maximum length $1.85^{\prime \prime}$ (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

## DIMENSIONS FOR "B"

To determine pad pattern layout length " B ":
Multiply the number of contact cavities in one row minus 1 by $.050^{\prime \prime}$ $\qquad$
If hardware features are within the contact area:
Add $.050^{\prime \prime}$ for each latch
Add .050 " for each guide post hole
Add . 100" for each screw receptacle
Total Length (Dimension B)

Notes: Maximum length $1.55^{\prime \prime}$ (39.37). Add .100 " from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100 " dimension must be adjusted).

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

## Dual Row Micro Strip

## STRAIGHT TAIL (TYPE DD) ORDERING GUIDE



G GUIDE POST/HOLE
GS MULTIPLE GUIDE POSTS/HOLES

LE LATCH (END MOUNT) LES MULTIPLE LATCHES
(END MOUNT)


LT LATCH (TOP MOUNT)
LTS MULTIPLE LATCHES (TOP MOUNT)


M
MOUNTING HOLE


CSR CENTER SCREW RECEPTACLE - PIN SIDE
ESR END SCREW RECEPTACLE - PIN SIDE


CRS CENTER RETAINING SCREW SOCKET SIDE
ERS END RETAINING SCREW - SOCKET
SIDE


CJP CENTER JACK POST - PIN SIDE
EJP END JACK POST - PIN SIDE


## HT

HIGH TEMP

## RoHS

RoHS COMPLIANT


# Dual Row Micro Strip 

## FLEX TAIL (TYPE FF)

Flex mount Micro Strip connectors are a low profile ruggedized connector on .050 " ( 1.27 mm ) centerlines. The SMT tails are formed together in an hourglass shape, allowing a double sided flex circuit to slide between the 2 rows of leads. The spring tension holds the flex in place during the soldering process. These durable light weight connectors are suitable for the most demanding applications. Available with retaining pin screws as well as mounting holes suitable for PCB and flex mounting. They feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. These connectors are
 available in standard sizes ranging from 2 through 64 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 $+125^{\circ} \mathrm{C}\left(200^{\circ} \mathrm{C}\right.$ w/HTE $)$
- Current rating:
- Voltage Rating (DWV): 3 AMPs max per contact
- Insulation Resistance: 600 VAC RMS Sea Level
- Shock: 5000 Megohms min @ 500 VDC
- Vibration: 50 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: 20 g's discontinuity < 1 microsecond
- Contact Resistance: NASA SP-R-0022
- Mating/Unmating Force: 26 Milliohms ( 65 mV max @ 2.5 amp ) 3 oz (85 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

## Dual Row Micro Strip

## DRS-FF LAYOUT



## DIMENSIONS FOR "A"

To determine connector length " A ":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same 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 $.050^{\prime \prime}$
Add .150" for each mounting hole
Add .100 " for each screw receptacle
Add fixed end length constant
Total Length (Dimension A)

Notes: Maximum length $1.85^{\prime \prime}$ (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

## DIMENSIONS FOR"B"

To determine pad pattern layout length " $B$ ":
Multiply the number of contact cavities in one row minus 1 by $.050^{\prime \prime}$
If hardware features are within the contact area:
Add $.050^{\prime \prime}$ for each latch
Add .050 " for each guide post hole
Add .100 " for each screw receptacle
Total Length (Dimension B)

Notes: Maximum length $1.55^{\prime \prime}$ (39.37). Add $.100^{\prime \prime}$ from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, $.100^{\prime \prime}$ dimension must be adjusted).

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

## Dual Row Micro Strip

## FLEX TAIL (TYPE FF) ORDERING GUIDE



# Dual Row Micro Strip 

LONG/SHORT ALT. THRU-HOLE (TYPE H2)

The Dual Row Micro Strip connectors have contacts arranged on .050 " ( 1.27 mm ) centerlines. The thru-hole tails are arranged in a 050 " $\times .100$ " grid, allowing for space for traces and annular rings. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. These durable light weight connectors are suitable for the most demanding applications. They are available with retaining screws as well as mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 64 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:
- Voltage Rating (DWV):
- Insulation Resistance: $\qquad$
3 AMPs max per contact
- Shock: 600 VAC RMS Sea Level 5000 Megohms min @ 500 VDC
- Vibration: 50 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: 20 g's discontinuity < 1 microsecond
- Contact Resistance: NASA SP-R-0022
- Mating/Unmating Force:

26 Milliohms (65 mV max @ 2.5 amp )
$3 \mathrm{oz}(85 \mathrm{~g})$ 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

## Dual Row Micro Strip

DRP-H2 LAYOUT


DIMENSIONS FOR "A"
To determine connector length " A ":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same 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 $.050^{\prime \prime}$
Add .150 "for each mounting hole
Add $.100^{\prime \prime}$ for each screw receptacle
Add fixed end length constant
Total Length (Dimension A)

Notes: Maximum length $1.85^{\prime \prime}$ (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

## DIMENSIONS FOR "B"

To determine pad pattern layout length " B ":
Multiply the number of contact cavities in one row minus 1 by $.050^{\prime \prime}$
If hardware features are within the contact area:
Add .050 " for each latch
Add .050 " for each guide post hole
Add . 100" for each screw receptacle
Total Length (Dimension B)

Notes: Maximum length $1.55^{\prime \prime}$ (39.37). Add .100 " from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100 " dimension must be adjusted).

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

## Dual Row Micro Strip

## DRS-H2 LAYOUT



## $9 t$



## DIMENSIONS FOR "A"

To determine connector length " A ":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same 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 $.050^{\prime \prime}$
Add .150" for each mounting hole
Add .100 " for each screw receptacle
Add fixed end length constant
Total Length (Dimension A)

Notes: Maximum length $1.85^{\prime \prime}(46.99)$. Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

## DIMENSIONS FOR"B"

To determine pad pattern layout length " $B$ ":
Multiply the number of contact cavities in one row minus 1 by $.050^{\prime \prime}$ If hardware features are within the contact area:

Add $.050^{\prime \prime}$ for each latch
Add .050 " for each guide post hole
Add .100 "for each screw receptacle
Total Length (Dimension B)

Notes: Maximum length $1.55^{\prime \prime}$ (39.37). Add $.100^{\prime \prime}$ from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100 " dimension must be adjusted).

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

## Dual Row Micro Strip

## SHORT/LONG ALT. THRU HOLE TAIL (TYPE H2) ORDERING GUIDE

## SERIES \# OF CONTACTS TERMINATION TYPE COMMON OPTIONS

DRP 02-64
PIN CONNECTOR


DRS
SOCKET CONNECTOR


EXAMPLES:


DRP-52-H2-ESR


DRS-43-H2-LE


DRS-43-H2-LT


DRS-32-H2-M

H2


LT LATCH (TOP MOUNT)
LTS MULTIPLE LATCHES (TOP MOUNT)


## M

MOUNTING HOLE


CSR CENTER SCREW RECEPTACLE - PIN SIDE
ESR END SCREW RECEPTACLE - PIN SIDE


CRS CENTER RETAINING SCREW -
SOCKET SIDE
ERS END RETAINING SCREW - SOCKET
SIDE


CJP CENTER JACK POST - PIN SIDE EJP END JACK POST - PIN SIDE

HT


HIGH TEMP

## RoHS

RoHS COMPLIANT

## Dual Row Micro Strip

## SOLDER CUP (TYPE SS)

The solder cup tails are commonly used for hand soldering applications and for specific wire-based devices that require a small robust connector during one of the final phases of production. These connectors feature Omnetics' gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. Available with fixing/retention jack screws as well as mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations and accept 26 AWG or smaller stranded wire.


## ELECTRO-MECHANICAL SPECS

- Durability:
- Temperature:
- Current rating:
- Voltage Rating (DWV):
- Insulation Resistance:
- Shock:
- Vibration:
- Thermal Vacuum Outgassing:
- Contact Resistance:
- Mating/Unmating Force:

2000 Cycles
$-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}\left(200^{\circ} \mathrm{C}\right.$ w/HTE)
3 AMPs max per contact
600 VAC RMS Sea Level
5000 Megohms min @ 500 VDC
50 g's discontinuity < 1 microsecond 20 g's discontinuity < 1 microsecond NASA SP-R-0022
26 Milliohms ( 65 mV max @ 2.5 amp )
3 oz ( 85 g ) typical per contact

## MATERIAL SPECIFICATIONS

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

Hard Gold Plated per ASTM B488
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

## Dual Row Micro Strip

DRP-SS LAYOUT


## DIMENSIONS FOR "A"

To determine connector length " A ":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same row
Add 1 contact cavity for each guide post in the same row
Total contact cavities in a single row
Subtract 1 from the total to get the number of cavity spaces and mulitply by .050" $\qquad$
Add .150 " for each mounting hole
Add .100 " for each screw receptacle
Add fixed end length constant .062"
Total Length (Dimension A):

Notes: Maximum length $1.85^{\prime \prime}$ (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer. Dimensions in [ ] are in Millimeters unless otherwise noted and are for reference only.

## Dual Row Micro Strip

## DRS-SS LAYOUT



## 09



## DIMENSIONS FOR "A"

To determine connector length "A":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same row
Add 1 contact cavity for each guide post hole in the same row
Total contact cavities in a single row
Subtract 1 from the total to get the number of cavity spaces and mulitply by .050 " $\qquad$
Add .150 " for each mounting hole
Add 100 " for each screw receptacle
Add fixed end length constant
Total Length (Dimension A) $\qquad$

Notes: Maximum length $1.85^{\prime \prime}$ (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [ ] are in Millimeters unless otherwise noted and are for reference only.

## Dual Row Micro Strip

## SOLDERCUP (TYPE SS) ORDERING GUIDE

## SERIES \# OF CONTACTS TERMINATION TYPE

## COMMON OPTIONS

## DRP <br> SS

 PIN CONNECTOR

DRS
SOCKET CONNECTOR


EXAMPLES:


DRP-43-SS-LE


DRS-43-SS-LE


DRS-43-SS-LT

DRS-32-SS-M


LT LATCH (TOP MOUNT)
LTS MULTIPLE LATCHES (TOP MOUNT)

CSR CENTER SCREW RECEPTACLE - PIN SIDE
ESR END SCREW RECEPTACLE - PIN SIDE


CRS CENTER RETAINING SCREW -
SOCKET SIDE
ERS END RETAINING SCREW - SOCKET
SIDE


CJP CENTER JACK POST - PIN SIDE EJP END JACK POST - PIN SIDE

## HT

HIGH TEMP

## RoHS

RoHS COMPLIANT

## Dual Row Micro Strip

## VERTICAL SMT (TYPE VV)

Vertical SMT Micro Strip connectors require a minimal amount of board space on flex circuits and rigid circuit boards. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. These rugged light weight connectors are suitable for the most demanding applications. Available with retaining screws as well as mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through
These connectors are available in standard size
64 positions as well as custom configurations.



## ELECTRO-MECHANICAL SPECS

- Durability:
- Temperature:
- Current rating:
- Voltage Rating (DWV):
- Insulation Resistance:
- Shock:
- Vibration:
- Thermal Vacuum Outgassing:
- Contact Resistance:
- Mating/Unmating Force:

2000 Cycles
$-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}\left(200^{\circ} \mathrm{C}\right.$ w/HTE)
3 AMPs max per contact
600 VAC RMS Sea Level
5000 Megohms min @ 500 VDC
50 g's discontinuity < 1 microsecond 20 g's discontinuity < 1 microsecond NASA SP-R-0022
26 Milliohms ( 65 mV max @ 2.5 amp )
$3 \mathrm{oz}(85 \mathrm{~g})$ 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

## Dual Row Micro Strip

DRP-VV LAYOUT


DIMENSIONS FOR "A"
To determine connector length " A ":

| Add the total number of contacts in one row |  |
| :--- | :--- |
| Add 1 contact cavity for each latch in the same 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 $.050^{\prime \prime}$ |  |
| Add $.150^{\prime \prime}$ for each mounting hole | - |
| Add $.100^{\prime \prime}$ for each screw receptacle | $-.062^{\prime \prime}$ |
| Add fixed end length constant |  |
| Total Length (Dimension A) |  |

Notes: Maximum length $1.85^{\prime \prime}$ (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

## DIMENSIONS FOR "B"

To determine pad pattern layout length " $B$ ":
Multiply the number of contact cavities in one row minus 1 by $.050^{\prime \prime}$ $\qquad$
If hardware features are within the contact area:
Add . 050 " for each latch
Add .050 " for each guide post hole
Add . 100" for each screw receptacle
Total Length (Dimension B)

Notes: Maximum length $1.55^{\prime \prime}$ (39.37). Add $.100^{\prime \prime}$ from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100 " dimension must be adjusted).

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

## Dual Row Micro Strip

## DRS-VV LAYOUT



SUGGESTED PAD LAYOUT


## DIMENSIONS FOR "A"

To determine connector length " $A$ ":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same 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 .050 "
Add. 150 " for each mounting hole
Add .100 " for each screw receptacle
Add fixed end length constant
Total Length (Dimension A)

Notes: Maximum length $1.85^{\prime \prime}$ (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

## DIMENSIONS FOR"B"

To determine pad pattern layout length " B ":
Multiply the number of contact cavities in one row minus 1 by $.050^{\prime \prime}$
If hardware features are within the contact area:
Add $.050^{\prime \prime}$ for each latch
Add .050 " for each guide post hole
Add .100 " for each screw receptacle
Total Length (Dimension B)

Notes: Maximum length 1.55 " (39.37). Add $.100^{\prime \prime}$ from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100 " dimension must be adjusted).

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

## Dual Row Micro Strip

## VERTICAL SMT (TYPE VV) ORDERING GUIDE

## SERIES \# OF CONTACTS TERMINATION TYPE

## COMMON OPTIONS

## DRP

PIN CONNECTOR


DRS
SOCKET CONNECTOR


02-64



DRP-43-VV-LE

DRS-43-VV-LT




DRS-43-VV-LE

G GUIDE POST/HOLE
GS MULTIPLE GUIDE POSTS/HOLES


LT LATCH (TOP MOUNT)
LTS MULTIPLE LATCHES (TOP MOUNT)

CSR CENTER SCREW RECEPTACLE - PIN SIDE
ESR END SCREW RECEPTACLE - PIN SIDE


CRS CENTER RETAINING SCREW SOCKET SIDE
ERS END RETAINING SCREW - SOCKET SIDE


CJP CENTER JACK POST - PIN SIDE EJP END JACK POST - PIN SIDE

## HT



HIGH TEMP

## RoHS

RoHS COMPLIANT

## Dual Row Micro Strip

## PRE-WIRED/CABLE (TYPE WD/WC)

Pre-wired Dual Row Micro Strip connectors are available with 26 AWG to 32 AWG stranded wire. These assemblies are crimped using proprietary semi-automated crimping systems. Due to the small size and precision required to make these quality crimps, hand crimping
 is not an option. Pre-crimped wires and contacts are potted in place, further protecting the integrity of the crimp joint. Building these parts to order allows for maximum flexibility in wire type, size and color coding. Commercial Off The Shelf (COTS) versions are also available with 18 " of color coded 26 AWG Teflon for quick turn around.

These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations.

## ELECTRO-MECHANICAL SPECS

- Durability:
- Temperature:
- Current rating:
- Voltage Rating (DWV):
- Insulation Resistance:
- Shock:
- Vibration:
- Thermal Vacuum Outgassing:
- Contact Resistance:
- Mating/Unmating Force:

2000 Cycles $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}\left(200^{\circ} \mathrm{C}\right.$ w/HTE) 3 AMPs max per contact 600 VAC RMS Sea Level 5000 Megohms min @ 500 VDC 50 g's discontinuity < 1 microsecond 20 g's discontinuity < 1 microsecond NASA SP-R-0022
26 Milliohms (65 mV max @ 2.5 amp ) 3 oz (85 g) typical per contact

## MATERIAL SPECIFICATIONS

- Standard Wire:
- Insulator:
- Pin:
- Socket:
- Encapsulant:

26 AWG, Teflon Insulated per NEMA-HP3
Polyphenylene Sulfide per MIL-M-24519 Gold Plated BeCu Gold Plated Copper Alloy Epoxy

## Dual Row Micro Strip

DRP-WD/WC LAYOUT


## DIMENSIONS FOR "A"

To determine connector length " A ":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same row
Add 1 contact cavity for each guide post in the same row
Total contact cavities in a single row
Subtract 1 from the total to get the number of cavity spaces and mulitply by $.050^{\prime \prime}$ $\qquad$
Add .150 " for each mounting hole
Add .100 " for each screw receptacle
Add fixed end length constant
Total Length (Dimension A):
Notes: Maximum length $1.85^{\prime \prime}$ (46.99). Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer. Dimensions in [ ] are in Millimeters unless otherwise noted and are for reference only.

## Dual Row Micro Strip

DRS-WD/WC LAYOUT



## DIMENSIONS FOR "A"

To determine connector length " A ":
Add the total number of contacts in one row
Add 1 contact cavity for each latch in the same row
Add 1 contact cavity for each guide post hole in the same row
Total contact cavities in a single row
Subtract 1 from the total to get the number of cavity spaces and mulitply by .050 "
Add .150 " for each mounting hole
Add .100 " for each screw receptacle
Add fixed end length constant
Total Length (Dimension A )

Notes: Maximum length $1.85^{\prime \prime}(46.99)$. Maximum number of contact cavities is 64 . Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [ ] are in Millimeters unless otherwise noted and are for reference only.

## Dual Row Micro Strip

PRE-WIRED/CABLE (TYPE WD/WC) ORDERING GUIDE


EXAMPLES:


DRP-44-WD-18.00-C


DRS-44-WD-18.00-C

## COLOR

## COMMON

 OPTIONS

LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)


LT LATCH (TOP MOUNT)

## LTS MULTIPLE LATCHES (TOP

MOUNT)


M MOUNTING HOLE


CSR CENTER SCREW
RECEPTACLE - PIN SIDE
ESR END SCREW
RECEPTACLE - PIN SIDE


CRS CENTER RETAINING SCREW - SOCKET SIDE ERS END RETAINING SCREW SOCKET SIDE


CJP CENTER JACK POST - PIN SIDE
EJP END JACK POST - PIN SIDE


HT HIGH TEMP
RoHS RoHS COMPLIANT CS CUSTOMER SUPPLIED MATERIAL

