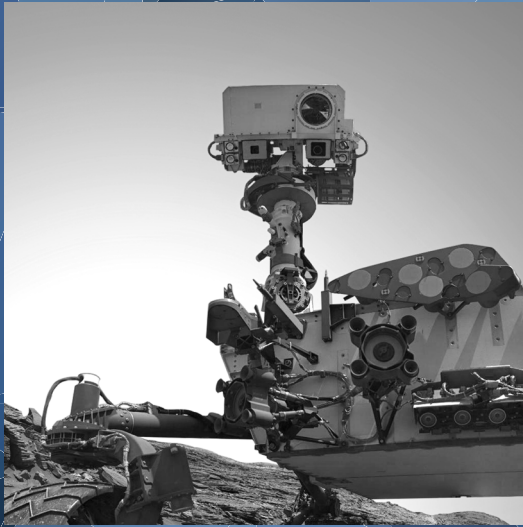


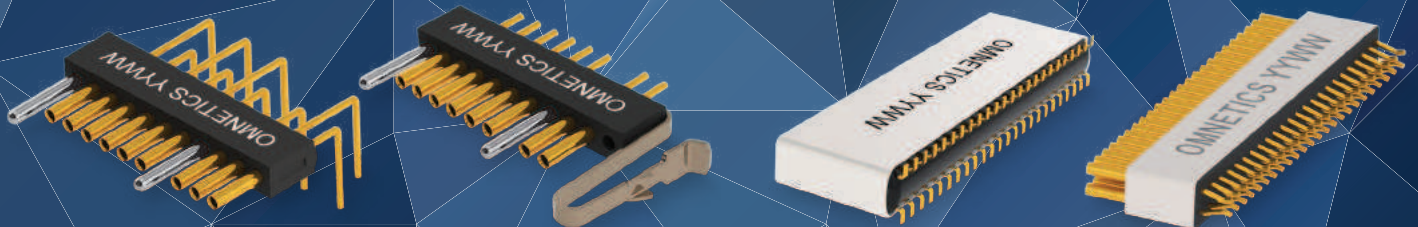
# OMNETICS

CONNECTOR CORPORATION



## MICRO & NANO STRIP CONNECTORS

Micro .050" (1.27mm) & Nano .025" (.64mm) Catalog



# Micro Strip Picture Index

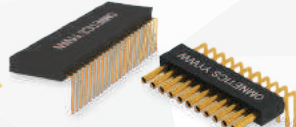
## SINGLE ROW MICRO STRIP (PS1/PS2/SSB) SERIES:



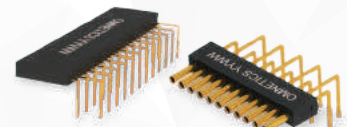
Horizontal SMT (AA)  
Pages 5-8



Straight Tail (DD)  
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Short Thru-Hole (BB)  
Pages 13-16



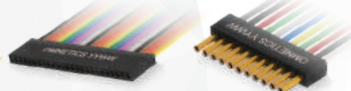
Short/Long Alt. Thru-Hole (H2)  
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Long Thru-Hole (CC)  
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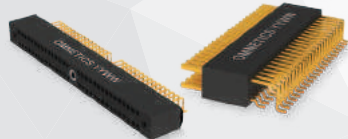


Solder Cup (SS)  
Pages 25-28

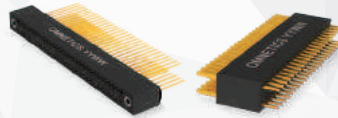


Pre-Wired (WD)  
Pages 29-32

## DUAL ROW MICRO STRIP (DRP/DRS) SERIES:



Horizontal SMT (AA)  
Pages 33-36



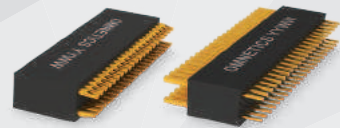
Straight Tail (DD)  
Pages 37-40



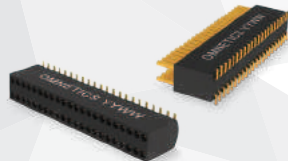
Flex Tail (FF)  
Pages 41-43



Short/Long Alt. Thru-Hole (H2)  
Pages 44-47



Solder Cup (SS)  
Pages 48-51

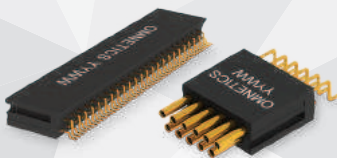


Vertical SMT (VV)  
Pages 52-55

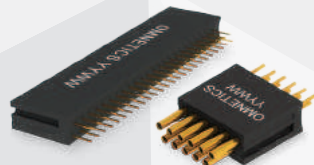


Pre-Wired (WD)  
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## DUAL ROW OFFSET MICRO STRIP (PSM/SSO) SERIES:



Horizontal SMT (AA)  
Pages 60-63



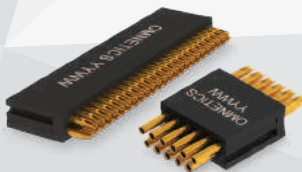
Straight Tail (DD)  
Pages 64-67



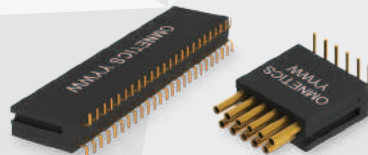
Flex Tail (FF)  
Pages 68-71



Short/Long Alt. Thru-Hole (H2)  
Pages 72-75



Solder Cup (SS)  
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Vertical SMT (VV)  
Pages 80-83



Pre-Wired (WD)  
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# Dual Row Offset 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 which meets the performance specifications of MIL-DTL-83513. These rugged light weight connectors are suitable for the most demanding applications. Available with mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations.



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### ELECTRO-MECHANICAL SPECS

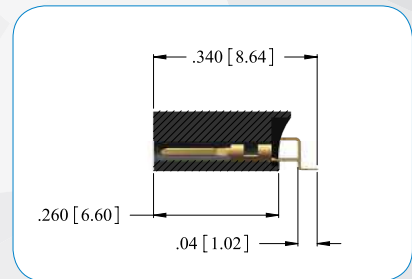
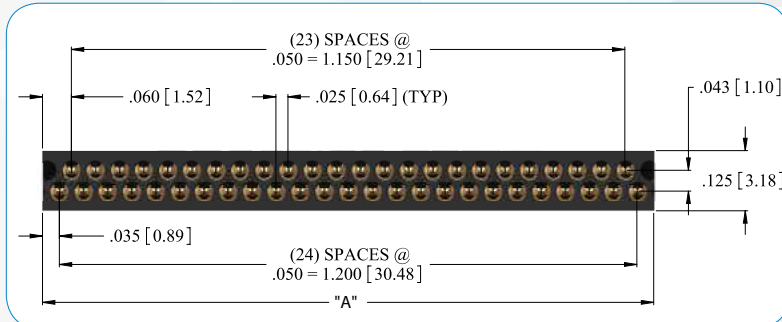
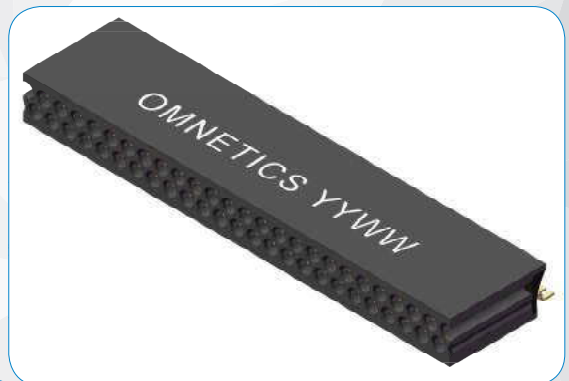
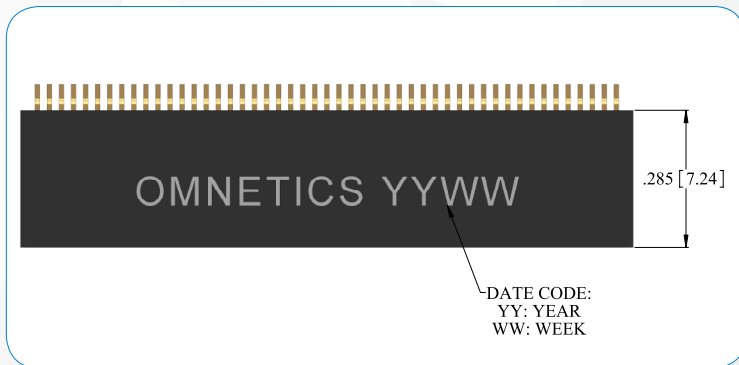
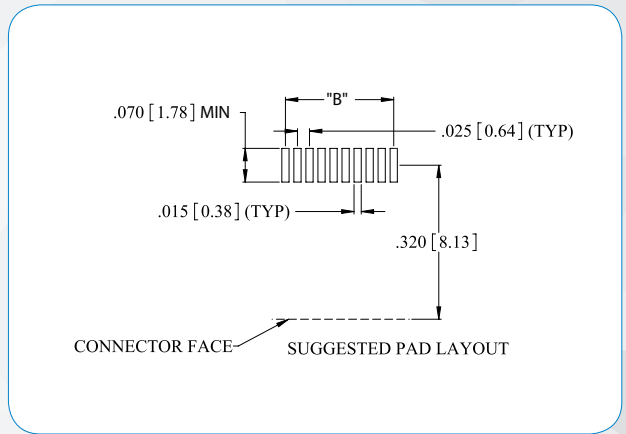
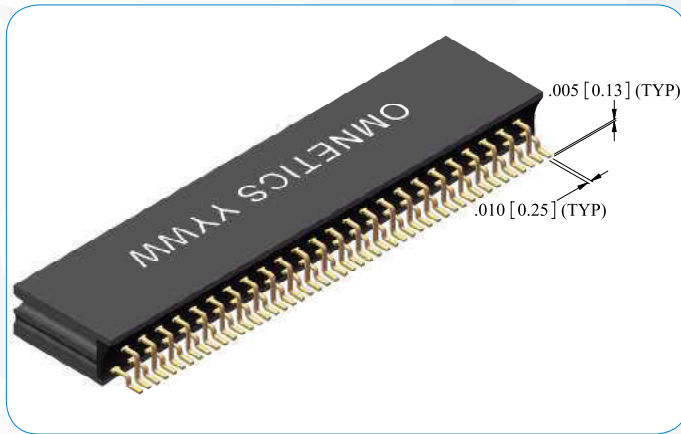
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPS max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond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

### MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
  
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

# Dual Row Offset Micro Strip

## PSM-AA LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":	
Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	.070**
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

### DIMENSIONS FOR "B"

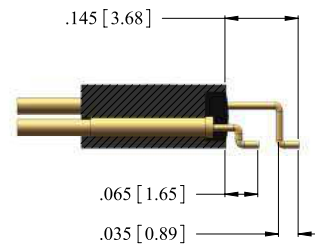
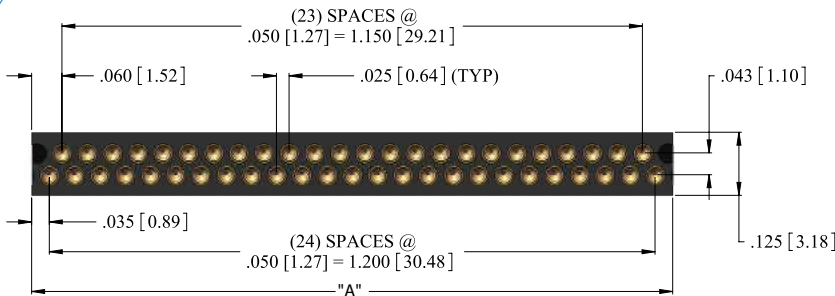
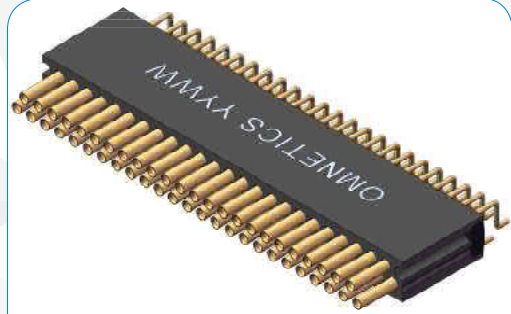
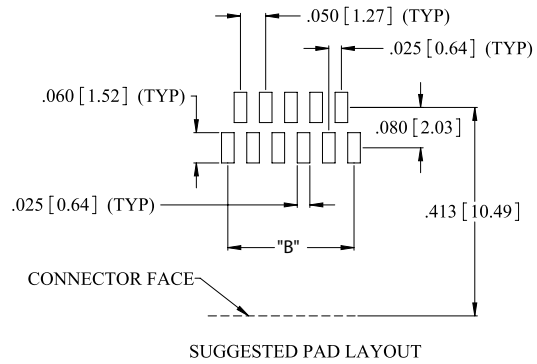
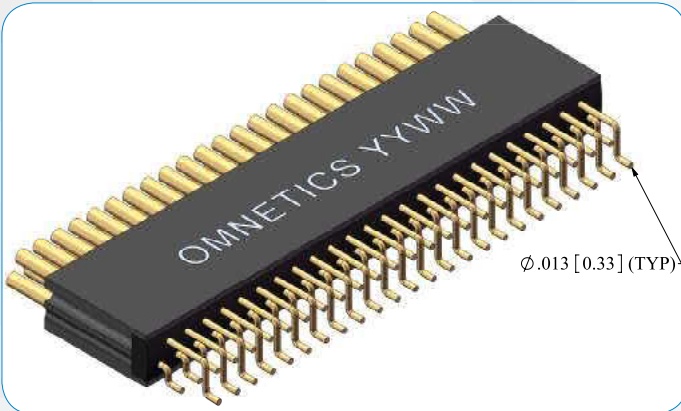
To determine pad pattern layout length "B":	
Multiply the number of contact cavities minus 1 by .025"	_____
If hardware features are within the contact area:	
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.40" (60.96). 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 Offset Micro Strip

## SSO-AA LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	.070**
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has 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":






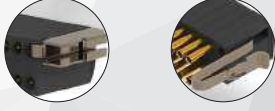

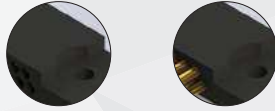
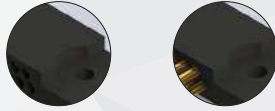
Multiply the number of contact cavities minus 1 by .025"	_____
If hardware features are within the contact area:	
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.40" (60.96). 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 Offset Micro Strip

## HORIZONTAL SMT (TYPE AA) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
<b>PSM</b> PIN CONNECTOR 	02 - 97	AA 	<b>G</b> GUIDE POST/HOLE <b>GS</b> MULTIPLE GUIDE POSTS/HOLES 
<b>SSO</b> SOCKET CONNECTOR 			<b>LE</b> LATCH (END MOUNT) <b>LES</b> MULTIPLE LATCHES (END MOUNT) 
			<b>LT</b> LATCH (TOP MOUNT) <b>LTS</b> MULTIPLE LATCHES (TOP MOUNT) 
			<b>M</b> MOUNTING HOLE 
			<b>HT</b> HIGH TEMP 

EXAMPLES:



PSM-42-AA-LE



SSO-35-AA-M-GS

RoHS RoHS COMPLIANT





# Dual Row Offset Micro Strip

## STRAIGHT TAIL (TYPE DD)

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

These connectors are available in standard sizes ranging from 2 through 97 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

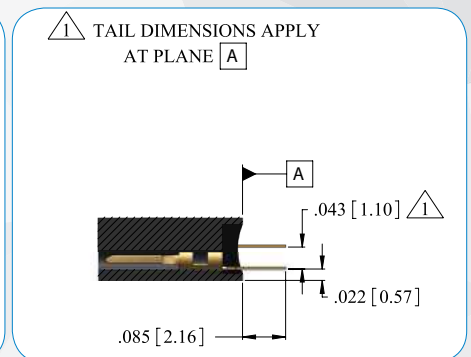
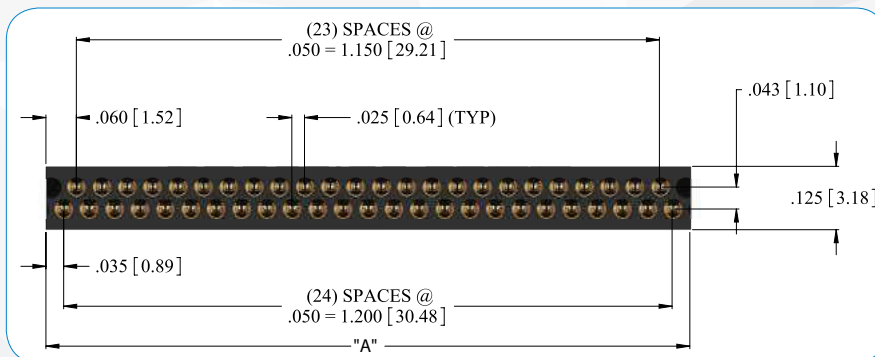
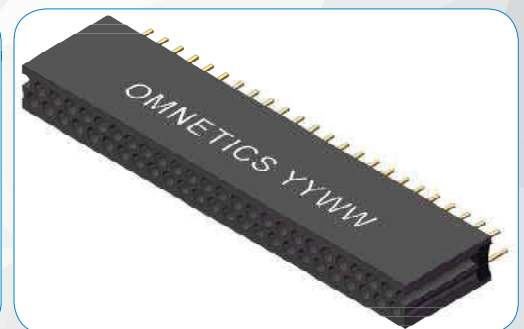
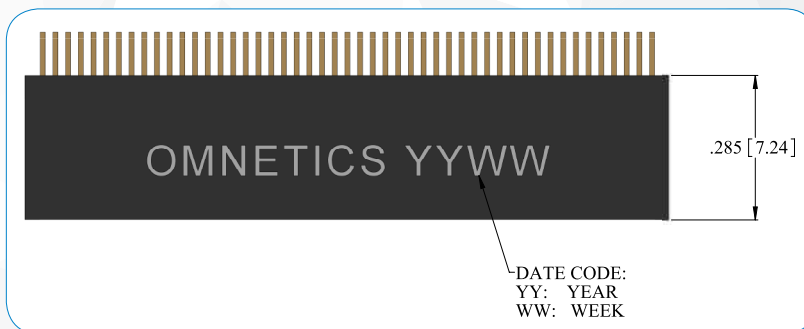
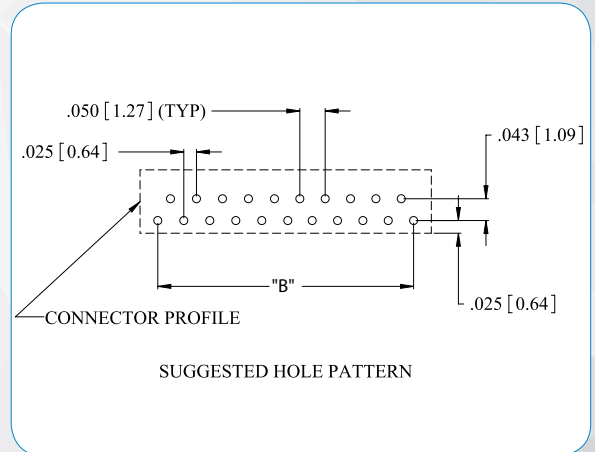
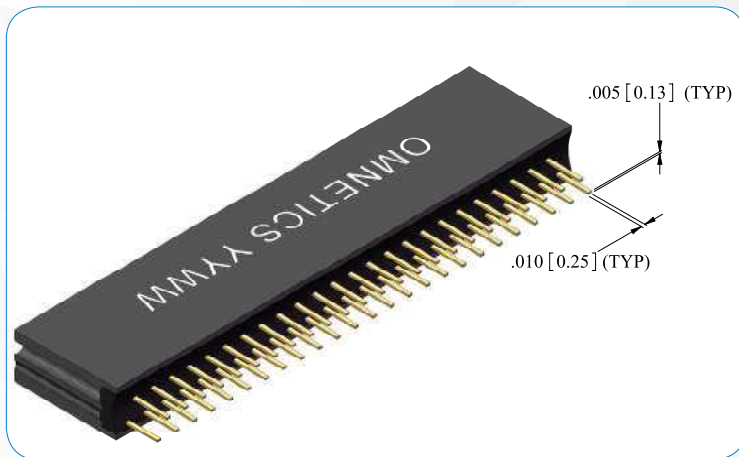
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPS max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond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

### MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
  
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

# Dual Row Offset Micro Strip

## PSM-DD LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	.070"*
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has 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 minus 1 by .025"	_____
If hardware features are within the contact area:	_____
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

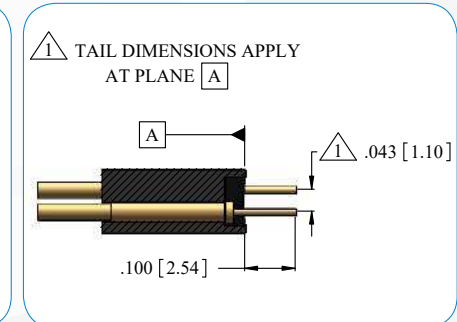
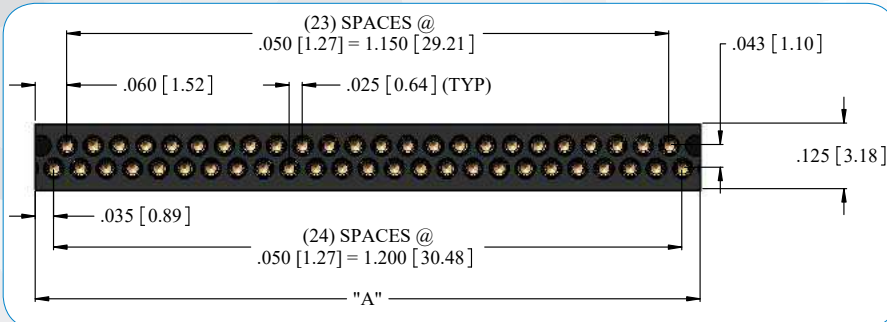
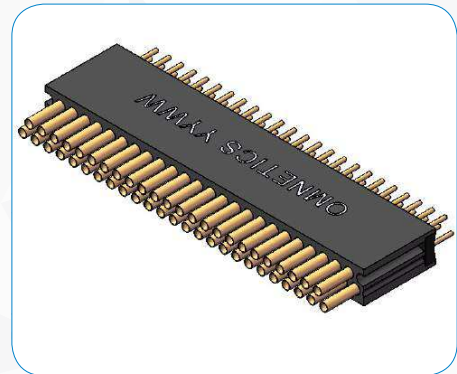
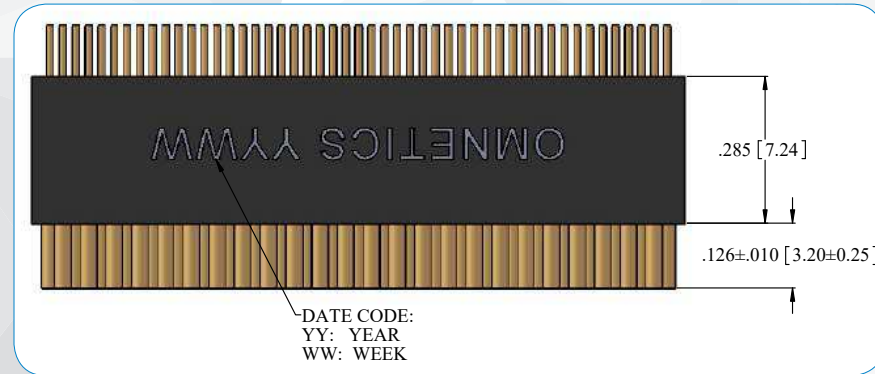
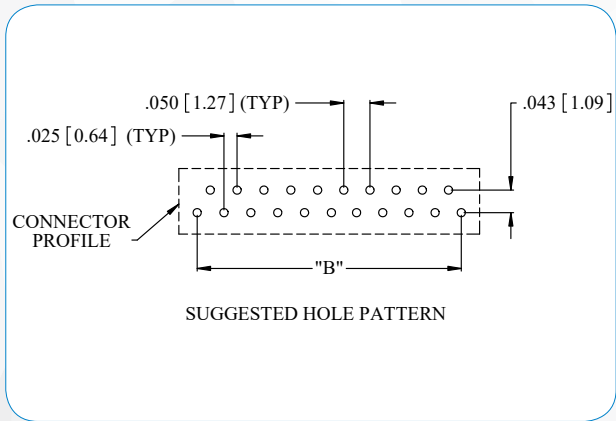
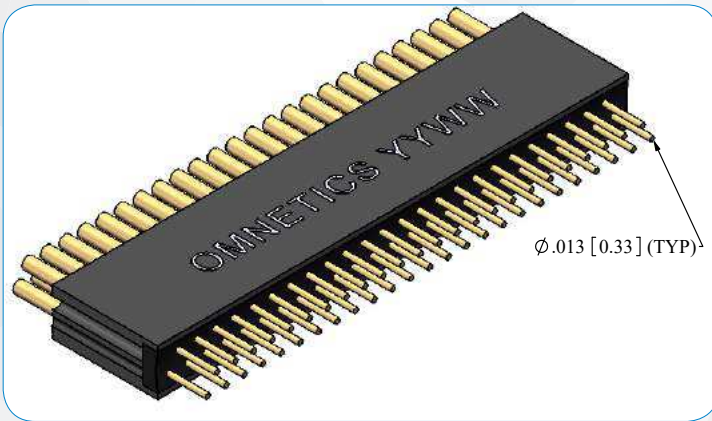
Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

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



# Dual Row Offset Micro Strip

## SSO-DD LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	.070"*
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has 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":


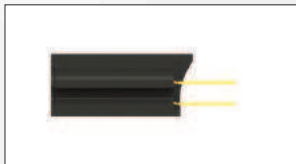
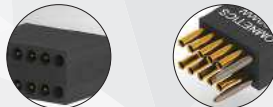


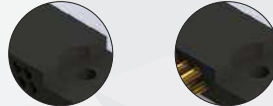
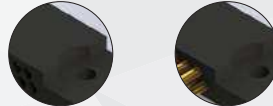


Multiply the number of contact cavities minus 1 by .025"	_____
If hardware features are within the contact area:	_____
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.40" (60.96). 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).

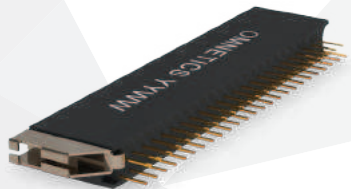
Dimensions in [ ] are in Millimeters unless otherwise noted and are for reference only.

# Dual Row Offset Micro Strip

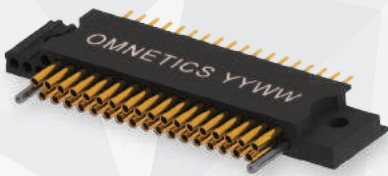
## STRAIGHT TAIL (TYPE DD) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
<b>PSM</b> PIN CONNECTOR 	02 - 97	DD 	<b>G</b> GUIDE POST/HOLE <b>GS</b> MULTIPLE GUIDE POSTS/HOLES  <b>LE</b> LATCH (END MOUNT) <b>LES</b> MULTIPLE LATCHES (END MOUNT)  <b>LT</b> LATCH (TOP MOUNT) <b>LTS</b> MULTIPLE LATCHES (TOP MOUNT)  <b>M</b> MOUNTING HOLE  <b>HT</b> HIGH TEMP 
<b>SSO</b> SOCKET CONNECTOR 			

EXAMPLES:



PSM-47-DD-LE



SSO-35-DD-M-GS

RoHS RoHS COMPLIANT

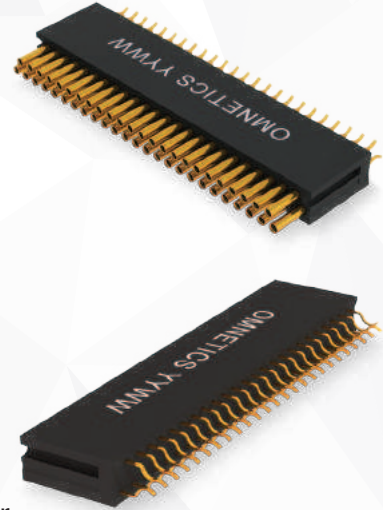


# Dual Row Offset Micro Strip

## FLEX TAIL (TYPE FF)

Flex mount offset 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. They are available with mounting holes suitable for PCB and flex mounting, and 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 97 positions as well as custom configurations. Flex design and installation service is also available from Omnetics. Please contact us for more information.



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### ELECTRO-MECHANICAL SPECS

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

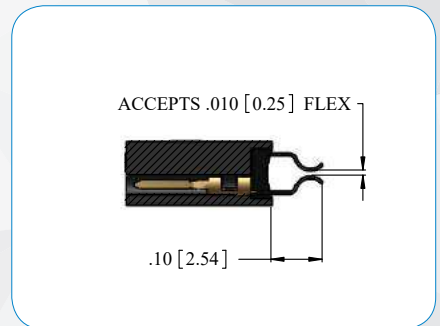
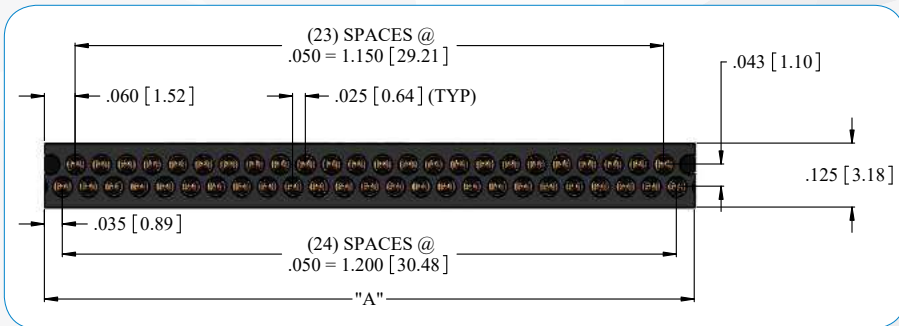
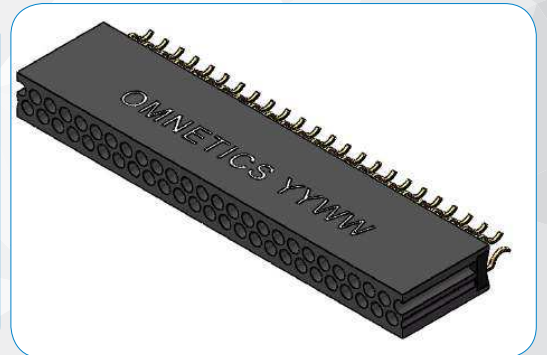
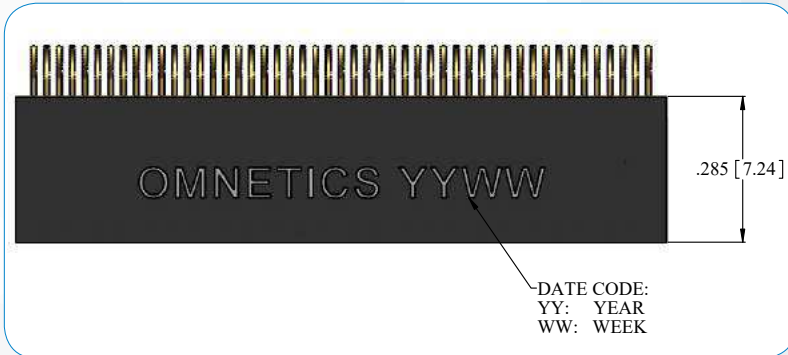
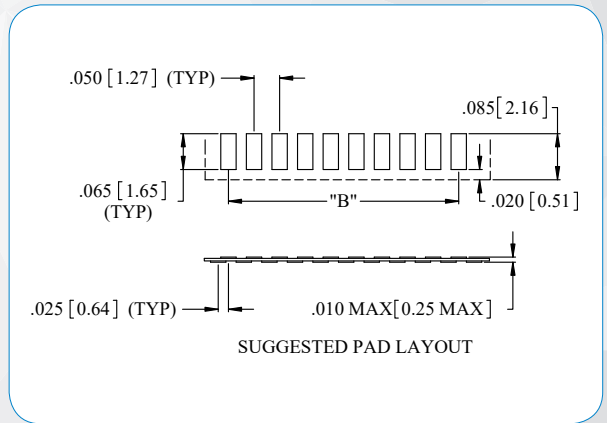
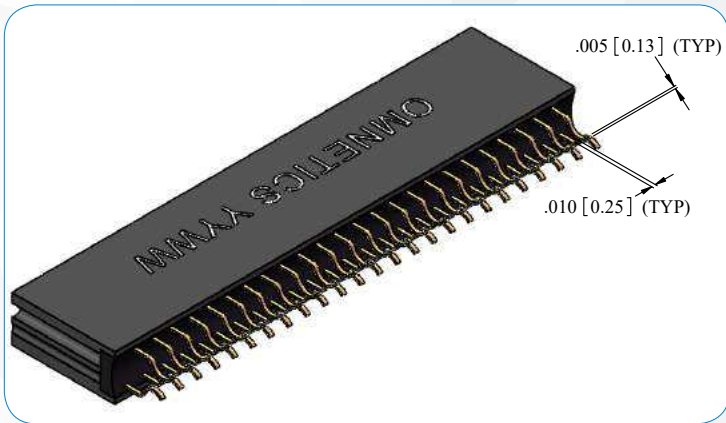
### MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
  
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy



# Dual Row Offset Micro Strip

## PSM-FF LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	.070"*
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has 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":

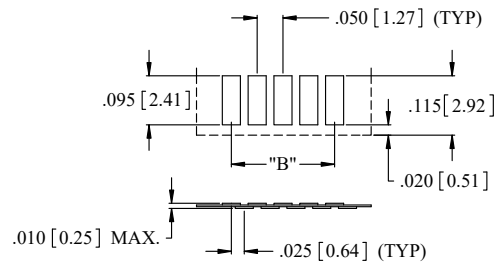
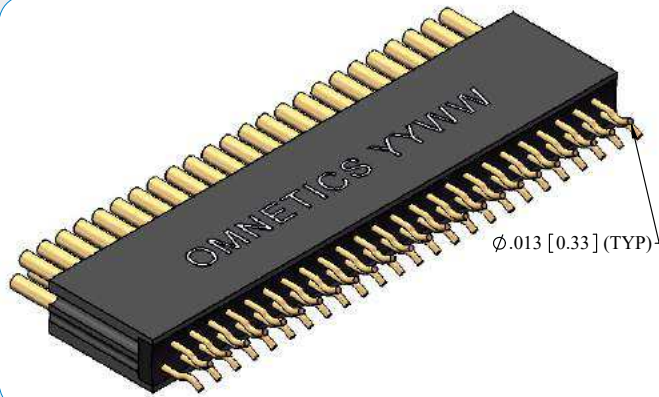
Multiply the number of contact cavities minus 1 by .025"	_____
If hardware features are within the contact area:	
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.40" (60.96). 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).

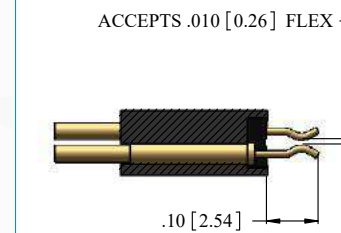
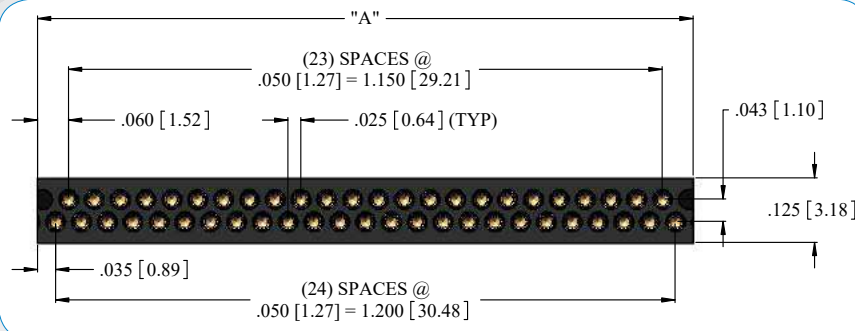
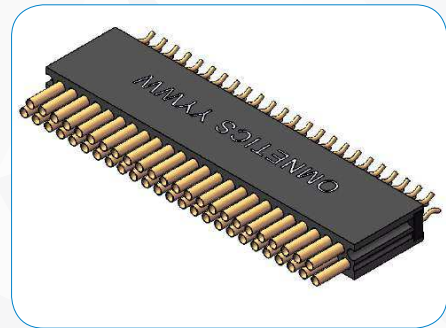
Dimensions in [ ] are in Millimeters unless otherwise noted and are for reference only.

# Dual Row Offset Micro Strip

## SSO-FF LAYOUT



SUGGESTED PAD LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":	
Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	.070"*
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

### DIMENSIONS FOR "B"


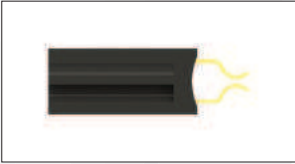







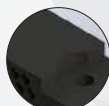
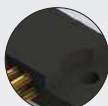
To determine pad pattern layout length "B":	
Multiply the number of contact cavities minus 1 by .025"	_____
If hardware features are within the contact area:	
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.40" (60.96). 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 Offset Micro Strip

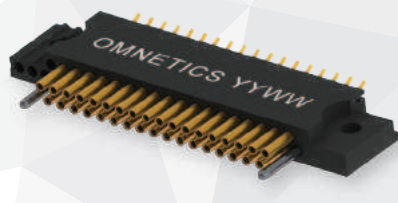
## FLEX TAIL (TYPE FF) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
<b>PSM</b> PIN CONNECTOR 	02 - 97	FF  	<b>G</b> GUIDE POST/HOLE <b>GS</b> MULTIPLE GUIDE POSTS/HOLES   <b>LE</b> LATCH (END MOUNT) <b>LES</b> MULTIPLE LATCHES (END MOUNT)   <b>LT</b> LATCH (TOP MOUNT) <b>LTS</b> MULTIPLE LATCHES (TOP MOUNT)   <b>M</b> MOUNTING HOLE   <b>HT</b> HIGH TEMP

EXAMPLES:



PSM-47-FF



SSO-35-FF-M-GS

**RoHS** RoHS COMPLIANT



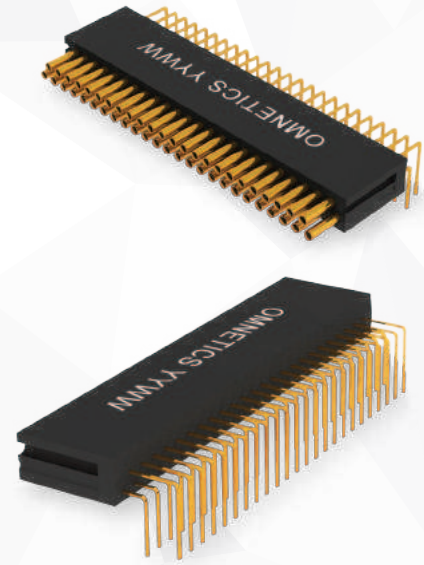


# Dual Row Offset Micro Strip

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

Dual Row Offset Micro Strip connectors have contacts arranged on .050" (1.27 mm) centerlines. The thru-hole tails are arranged in a .50" x .075" grid, allowing 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 designed to withstand the most demanding applications.

Available with mounting holes suitable for PCB and flex mounting. These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations.



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### ELECTRO-MECHANICAL SPECS

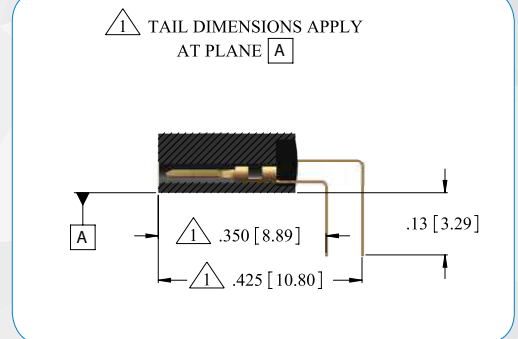
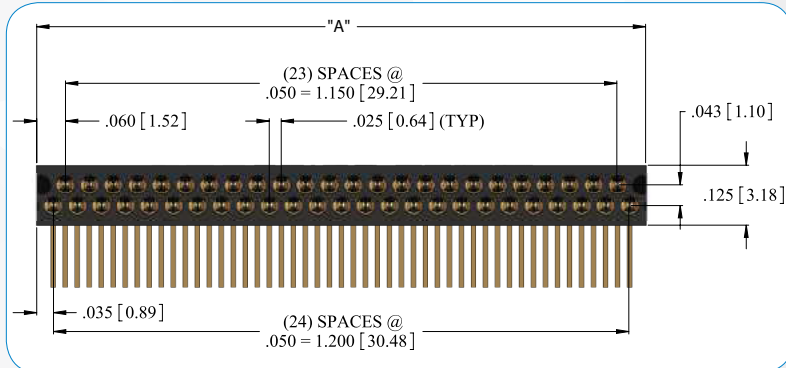
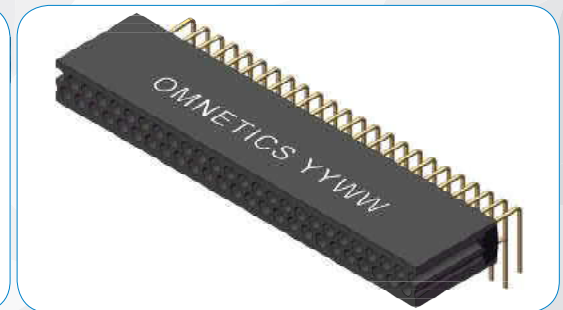
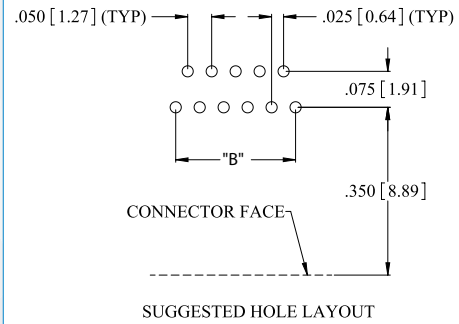
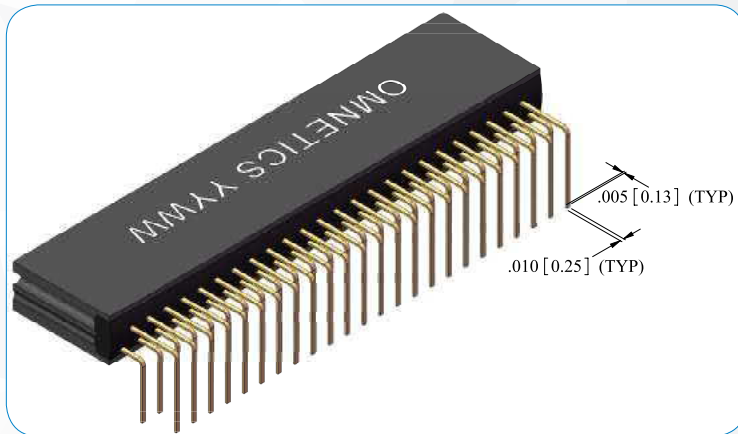
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPS max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond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

### MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
  
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

# Dual Row Offset Micro Strip

## PSM-H2 LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	.070"*
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has 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":

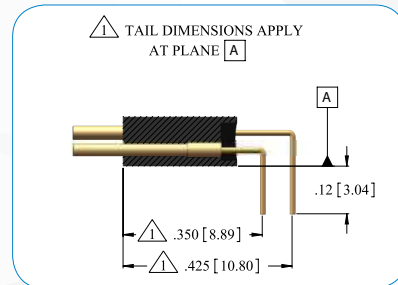
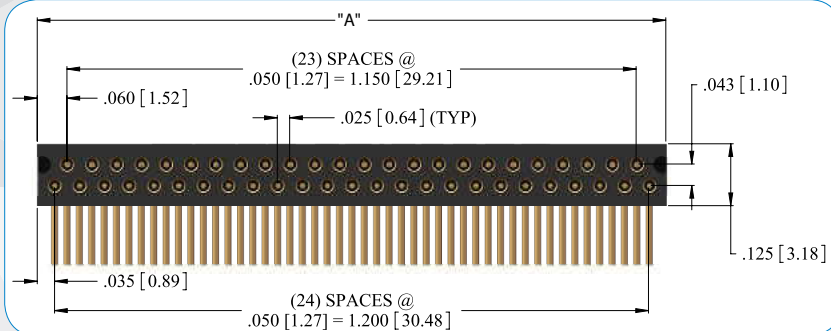
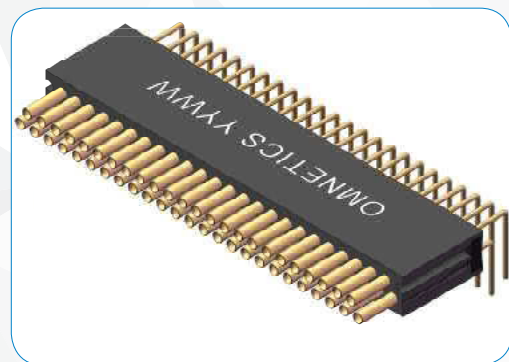
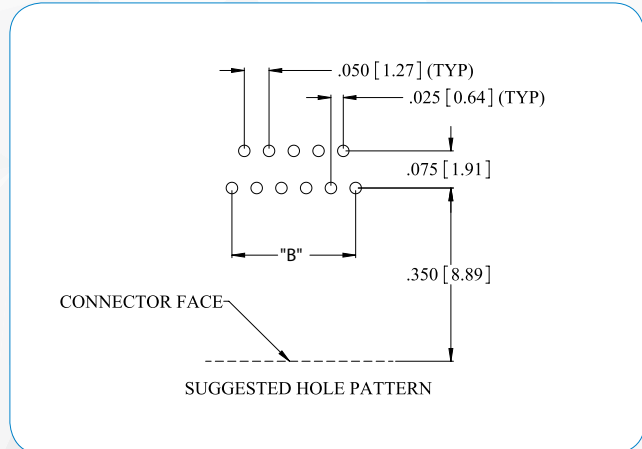
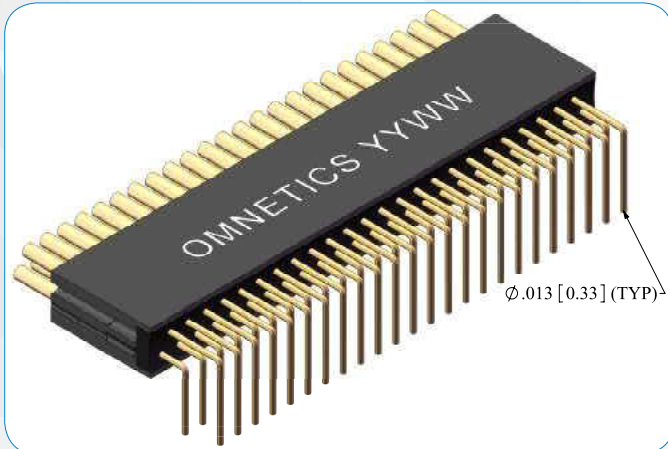
Multiply the number of contact cavities minus 1 by .025"	_____
If hardware features are within the contact area:	
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.40" (60.96). 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 Offset Micro Strip

## SSO-H2 LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":	
Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	<u>.070"</u> *
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has 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 minus 1 by .025"	_____
If hardware features are within the contact area:	
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.40" (60.96). 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 Offset Micro Strip

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

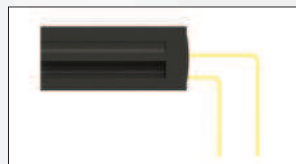
SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
--------	---------------	------------------	----------------

**PSM**  
PIN CONNECTOR



02 - 97

H2



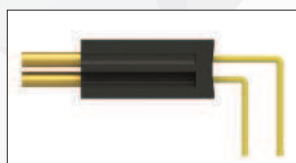
**G** GUIDE POST/HOLE  
**GS** MULTIPLE GUIDE POSTS/  
HOLES



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



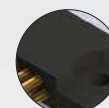
**SSO**  
SOCKET CONNECTOR



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



**M** MOUNTING HOLE

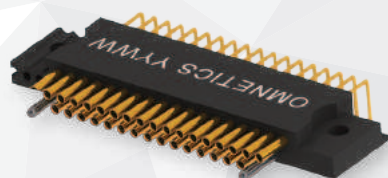


**HT** HIGH TEMP

EXAMPLES:



PSM-45-H2



SSO-35-H2-M-GS

**RoHS** RoHS COMPLIANT

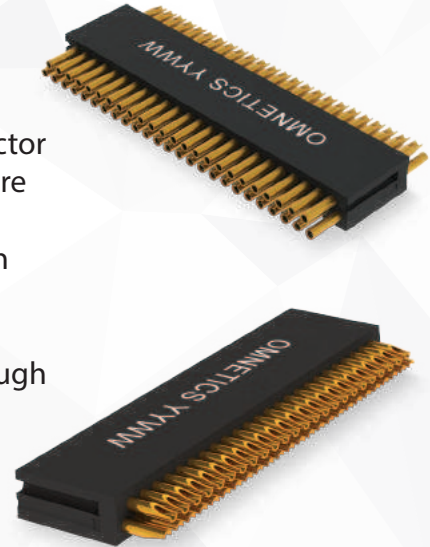


# Dual Row Offset Micro Strip

## SOLDER CUP (TYPE SS)

Solder Cup Tails are commonly used for hand soldering applications, and/or 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. They are available with mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations and accept 26 AWG or smaller stranded wire.



### ELECTRO-MECHANICAL SPECS

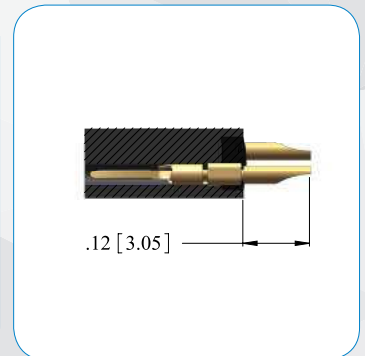
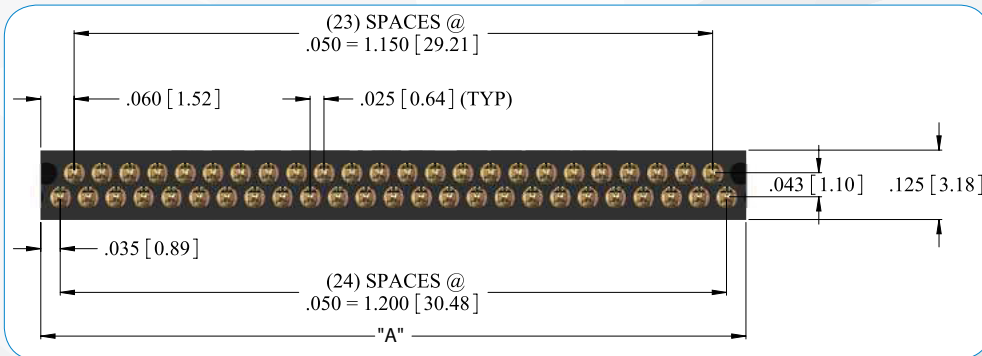
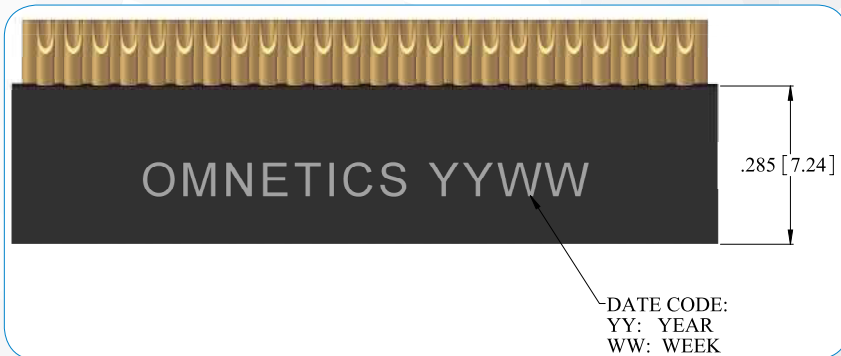
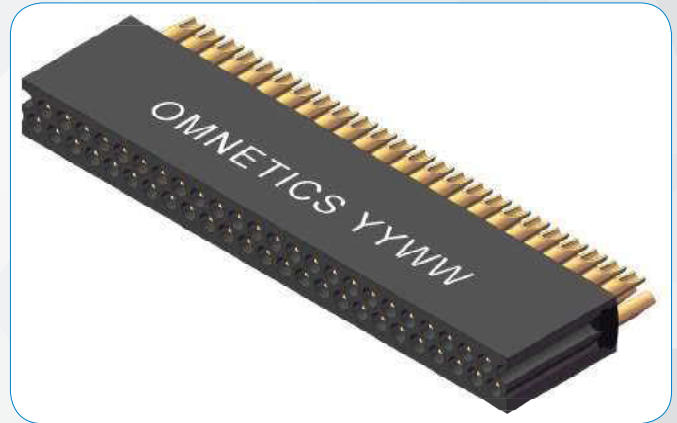
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond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

### MATERIAL SPECIFICATIONS

- Standard Socket Soldercup Termination: Hard Gold Plated per ASTM B488
- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Soldercup Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin Soldercup Termination: Hard gold plated per ASTM B488
- RoHS Socket Soldercup Termination: Hard gold plated per ASTM B488
  
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

# Dual Row Offset Micro Strip

## PSM-SS LAYOUT



### DIMENSIONS FOR "A"

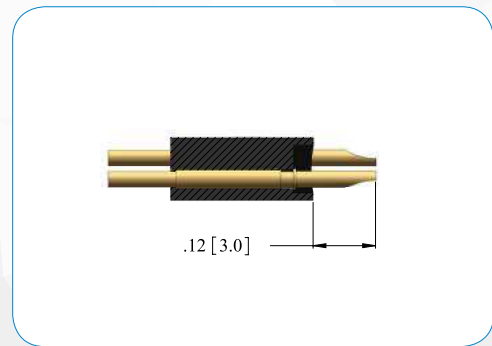
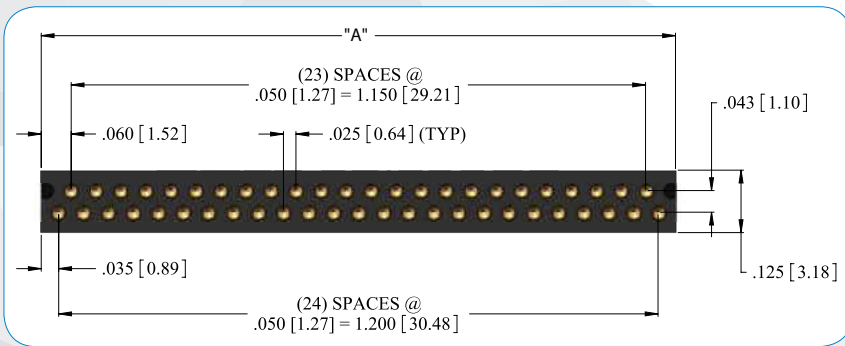
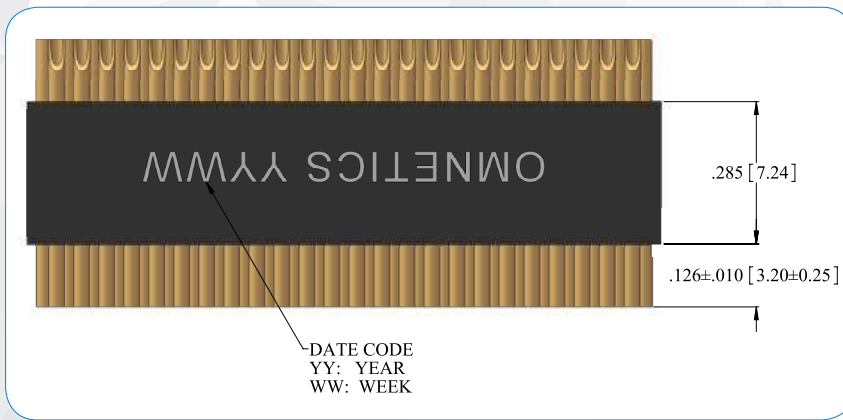
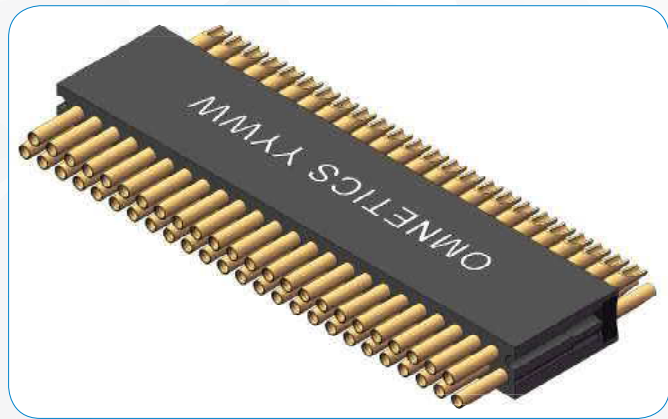
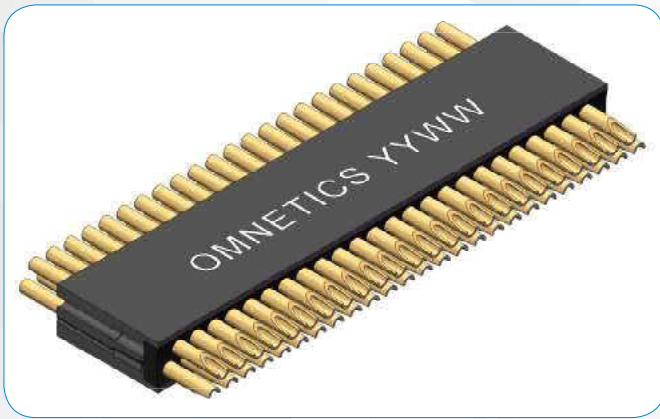
To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post hole	_____
Total contact cavities	_____
Subtract 1 from the total to get the number of cavity spaces and multiply by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	0.070"*
Total Length (Dimension A):	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes. \* Add 0.095" when an even number of contact cavities is used and the connector has 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 Offset Micro Strip

## SSO-SS LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":	
Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post hole	_____
Total contact cavities	_____
Subtract 1 from the total to get the number of cavity spaces and multiply by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	0.070"*
Total Length (Dimension A):	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes. \* Add 0.095" when an even number of contact cavities is used and the connector has 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 Offset Micro Strip

## SOLDER CUP (TYPE SS) ORDERING GUIDE

**SERIES**

**# OF CONTACTS**

**TERMINATION TYPE**

**COMMON OPTIONS**

**PSM**  
PIN CONNECTOR

**02 - 97**

**SS**

**G** GUIDE POST/HOLE  
**GS** MULTIPLE GUIDE POSTS/  
HOLES



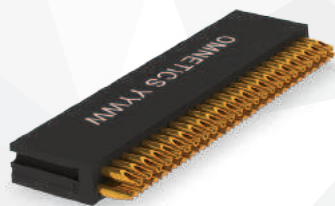
**LE** LATCH (END MOUNT)  
**LES** MULTIPLE LATCHES  
(END MOUNT)

**SSO**  
SOCKET CONNECTOR



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

EXAMPLES:



PSM-50-SS-RoHS

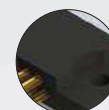
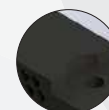


SSO-50-SS

**M** MOUNTING HOLE



**HT** HIGH TEMP



**RoHS** RoHS COMPLIANT

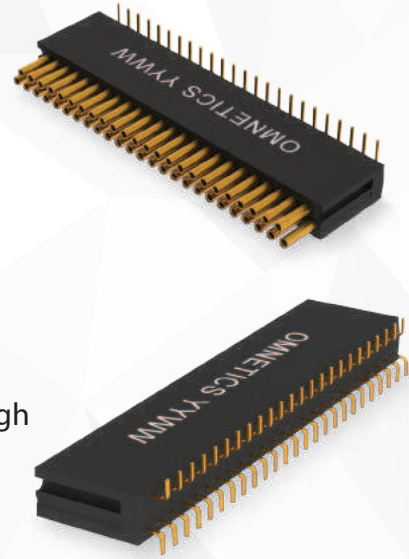


# Dual Row Offset Micro Strip

## 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 mounting holes and suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations.



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### ELECTRO-MECHANICAL SPECS

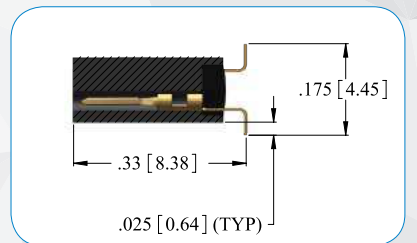
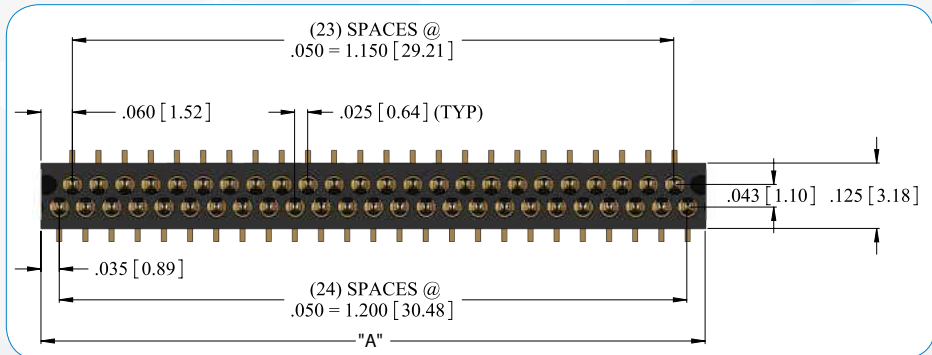
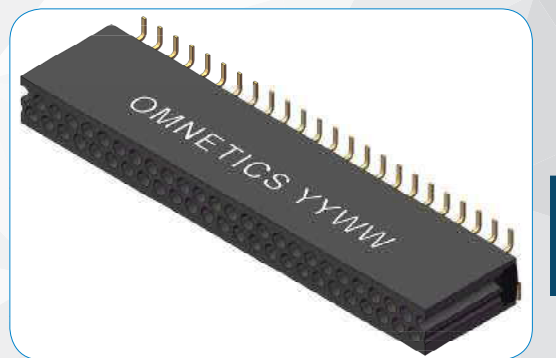
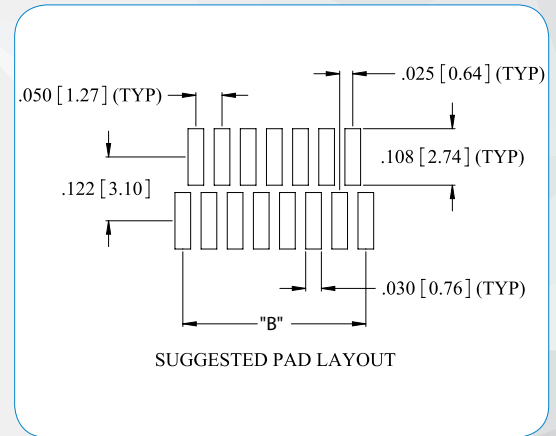
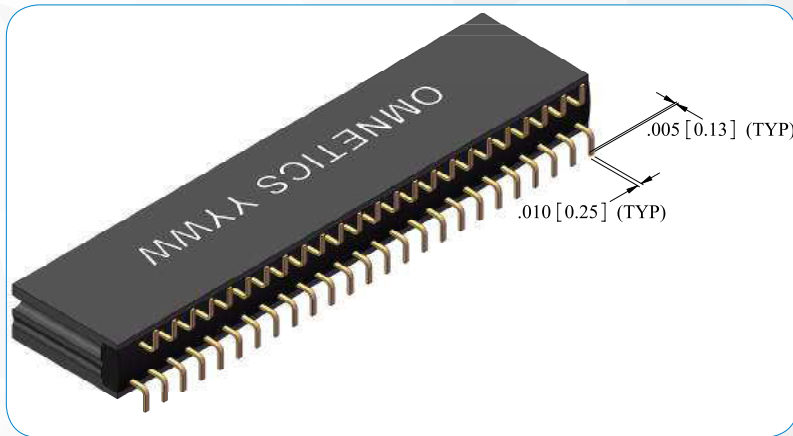
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond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

### MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
  
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

# Dual Row Offset Micro Strip

## PSM-VV LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	.070"*
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has 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":

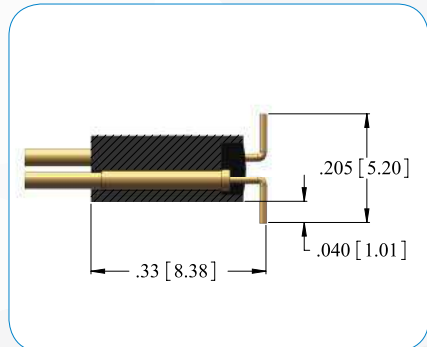
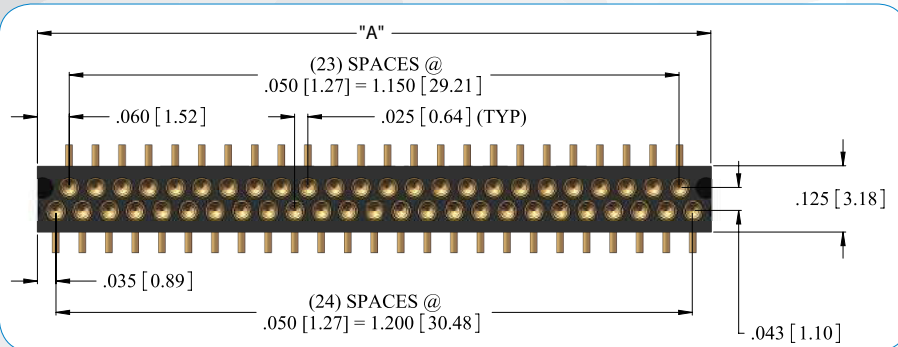
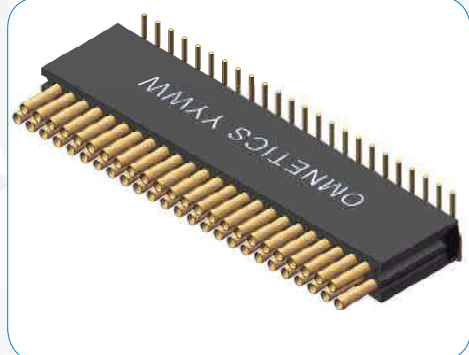
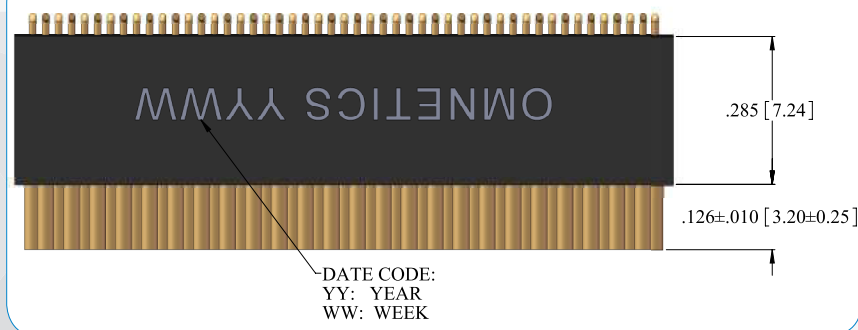
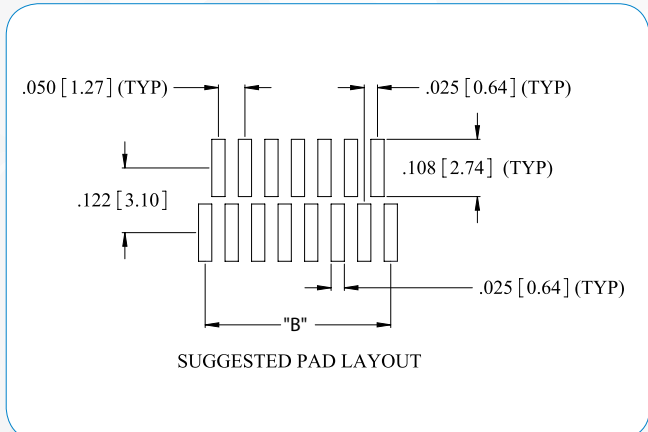
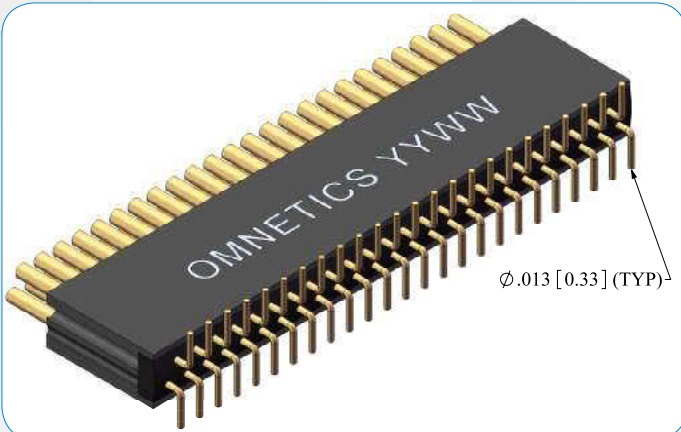
Multiply the number of contact cavities minus 1 by .025"	_____
If hardware features are within the contact area:	
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.40" (60.96). 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 Offset Micro Strip

## SSO-VV LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":	
Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	.070"*
Total Length (Dimension A)	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

\* Add 0.095" when an even number of contact cavities is used and the connector has 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 minus 1 by .025"	_____
If hardware features are within the contact area:	
Add .025" for each latch	_____
Add .025" for each guide post hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.40" (60.96). 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 Offset Micro Strip

## VERTICAL SMT (TYPE VV) ORDERING GUIDE

**SERIES**

**# OF CONTACTS**

**TERMINATION TYPE**

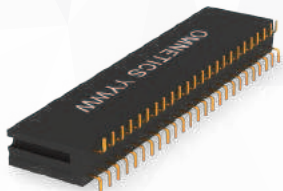
**COMMON OPTIONS**

**PSM**  
PIN CONNECTOR

02 - 97

**VV**

**G** GUIDE POST/HOLE  
**GS** MULTIPLE GUIDE POSTS/  
HOLES



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

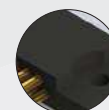
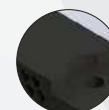
**SSO**  
SOCKET CONNECTOR



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



**M** MOUNTING HOLE

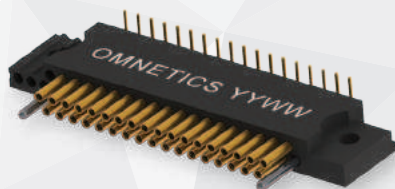


**HT** HIGH TEMP

EXAMPLES:



PSM-49-VV-GS



SSO-35-VV-M-GS

**RoHS** RoHS COMPLIANT



# Dual Row Offset Micro Strip

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

Pre-wired offset 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 97 positions as well as custom configurations.



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### ELECTRO-MECHANICAL SPECS

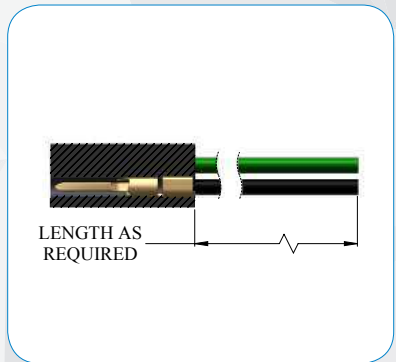
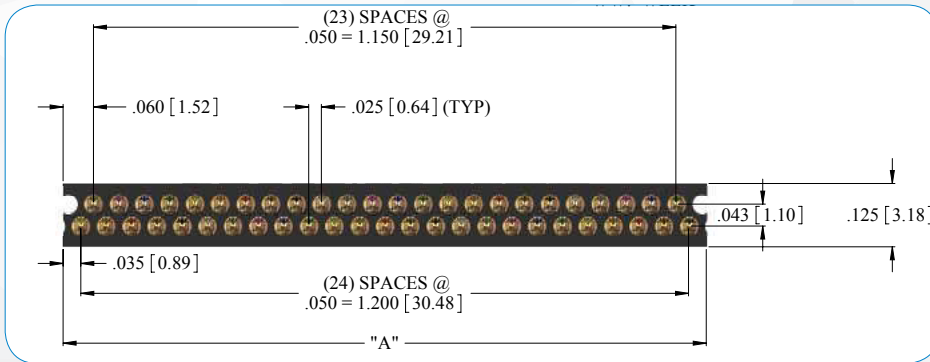
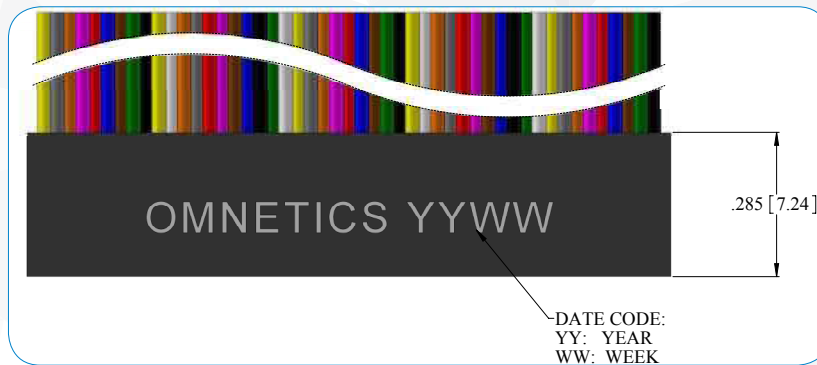
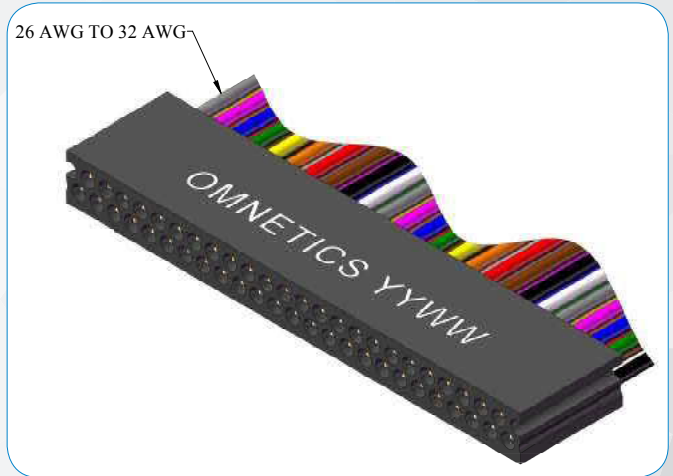
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond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

### MATERIAL SPECIFICATIONS

- Standard Wire: 26 AWG, Teflon Insulated per NEMA-HP3
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

# Dual Row Offset Micro Strip

## PSM-WD/WC LAYOUT



### DIMENSIONS FOR "A"

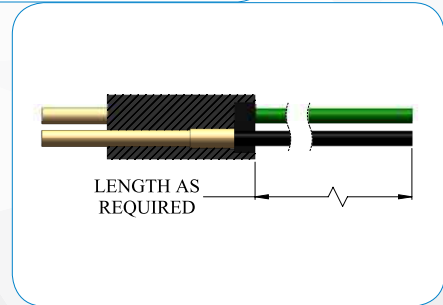
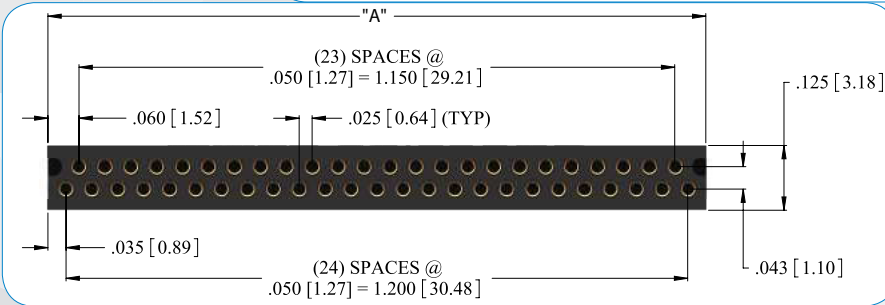
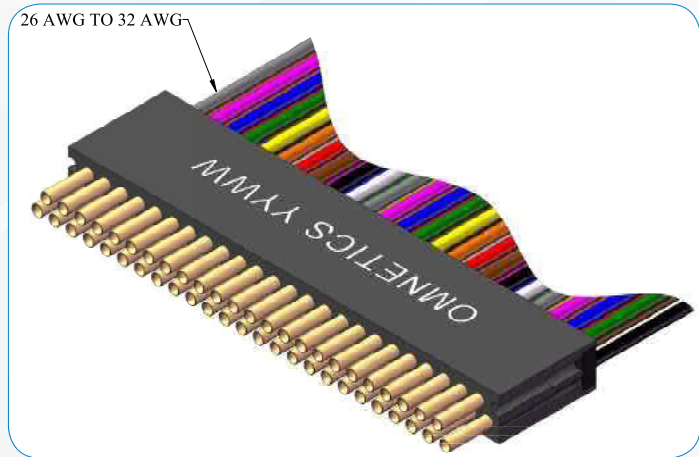
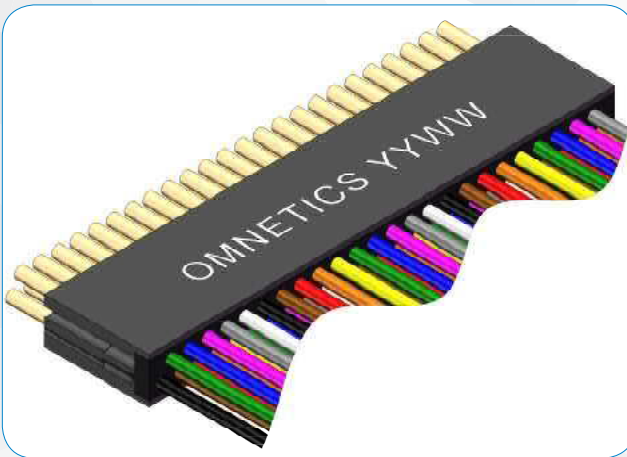
To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post hole	_____
Total contact cavities	_____
Subtract 1 from the total to get the number of cavity spaces and multiply by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	0.070"*
Total Length (Dimension A):	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes. \* Add 0.095" when an even number of contact cavities is used and the connector has 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 Offset Micro Strip

## SSO-WD/WC LAYOUT



### DIMENSIONS FOR "A"

To determine connector length "A":



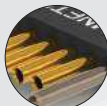


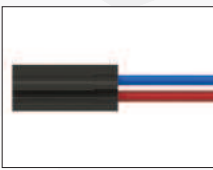


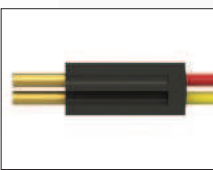


Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post hole	_____
Total contact cavities	_____
Subtract 1 from the total to get the number of cavity spaces and multiply by .025"	_____
Add .150" for each mounting hole	_____
Add fixed end length constant	0.070**
Total Length (Dimension A):	_____

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes. \* Add 0.095" when an even number of contact cavities is used and the connector has 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.

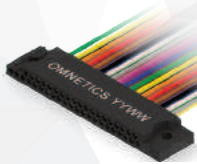


# Dual Row Offset Micro Strip

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

SERIES	# OF CONTACTS	TERMINATION TYPE	WIRE LENGTH	COLOR CODED	COMMON OPTIONS
PSM PIN CONNECTOR	02 - 97	WD DISCRETE WIRES	18.00 =18.00" STANDARD	C 10 REPEATING COLORS PER MIL-STD 681  Y ALL OTHER WIRE COLORS	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/ HOLES  
		TW TWISTED WIRES	XX.XX CUSTOM LENGTH i.e. 23.40 =23.40"		LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)  
SSO SOCKET CONNECTOR		WC CABLE	26 AWG Standard/MAX 		LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)  
		WX MULTIPLE WIRE TYPES 			M MOUNTING HOLE  

EXAMPLES:



PSM-WD-18.00-C-M-GS



SSO-11-WD-18.00-C



SSO-11-WC-18.00-C