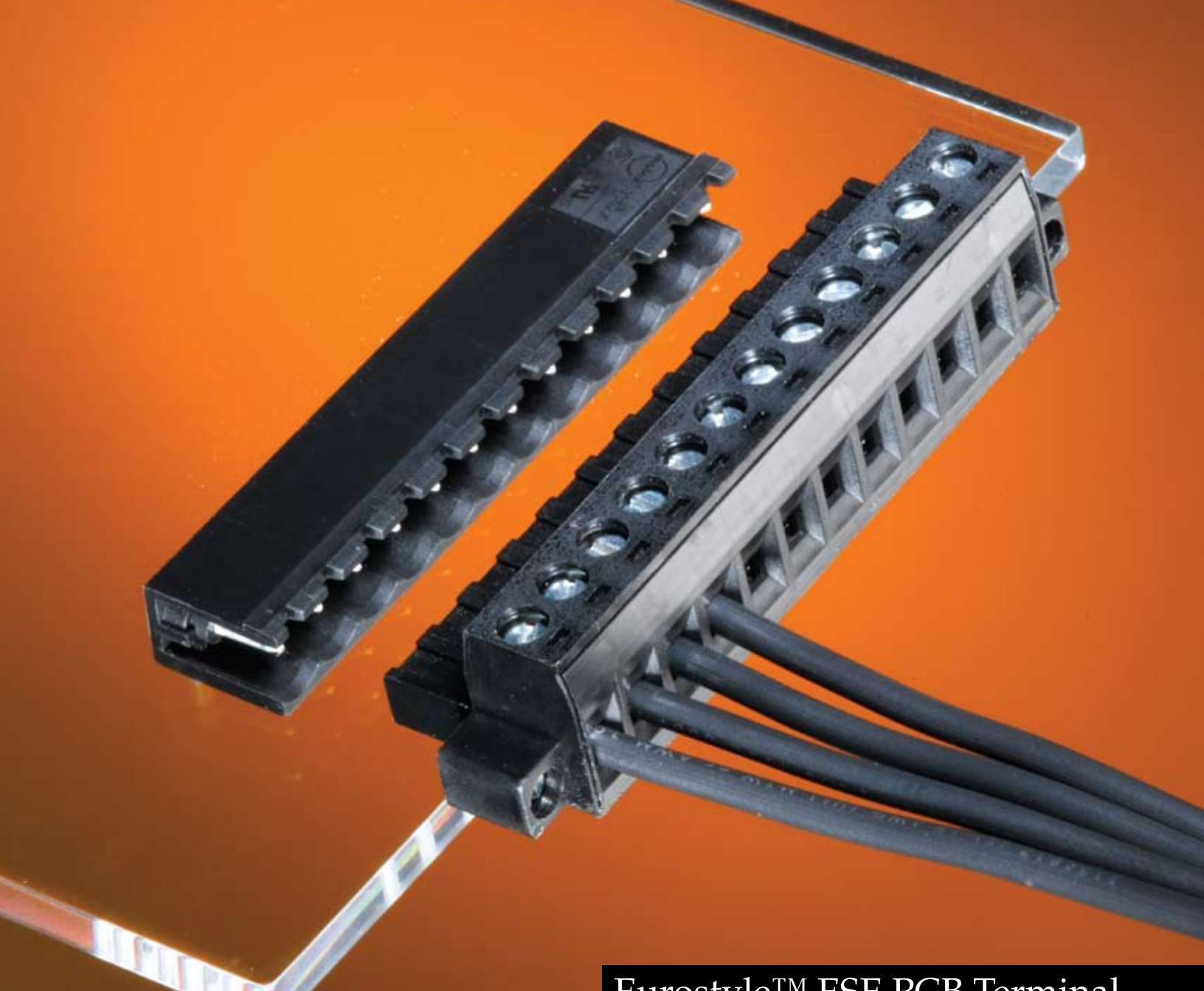




Eurostyle™ ESE PCB Terminal  
Blocks Pluggable and Fixed Mount





## Eurostyle™ ESE PCB Terminal Blocks

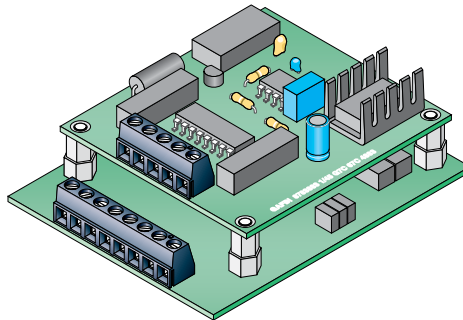
### Pluggable and Fixed Mount

*Fullfill your terminal block design requirements with a new and extensive range of ESE PCB terminal blocks from Molex.*

Choose from a variety of Molex ESE (Eurostyle Extension) PCB terminal blocks. This new product line includes pitch sizes from 3.50 to 5.08mm (.138 to .200") and is rated at 300V, from 8.0 to 15.0A. Select from fixed (single-piece) or pluggable (two-piece) terminal blocks from circuit sizes 2 through 24.

All ESE PCB terminal blocks from Molex are RoHS compliant and UL recognized for use in the U.S. and Canada. These blocks are compatible with Molex Beau® and other industry standard terminal blocks.

ESE terminal blocks provide economic benefits and enhance Molex's existing Eurostyle terminal block offering. For additional specifications on Eurostyle ESE Terminal Blocks, visit our website: [www.molex.com/product/ESEtermblocks.html](http://www.molex.com/product/ESEtermblocks.html).



#### Features and Benefits

- Fixed or pluggable product styles allow for maximum design flexibility
- Three different wire entry angles on fixed mount terminal blocks allow you to choose the best fit for your application
- Two optional styles of imprinting make identifying, testing and wiring easier in the field

- Surface Mount Compatible headers available in 5.00 and 5.08mm (.197 and .200") withstand reflow soldering temperatures, eliminating the need for a secondary wave soldering process
- Gold plating available on any part offers increased connectivity and durability in low power applications
- Captive screws in all terminal blocks mean that screws will not back out of housing or mounting ends

#### Applications

- Power Distribution
- Factory and Process Automation
- HVAC
- Security Systems
- Elevators
- Irrigation Systems
- Measurement and Control Systems

## ESE PCB TERMINAL BLOCK SPECIFICATIONS

### Reference Information

Packaging: Box  
UL File No.: E48521  
Flammability: UL 94 V-0

### Electrical

Voltage: 300V  
Insulation Resistance: 500 Megohms min.  
Withstanding Voltage: 4000V DC

### Mechanical

Operating Temperature:  
Standard Plugs and Headers  
-40 to +105°C  
Surface Mount Compatible Headers  
-40 to +140°C

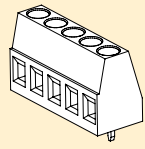
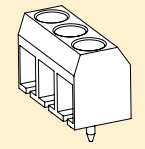
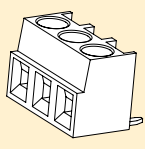
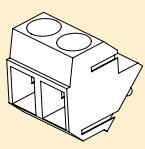
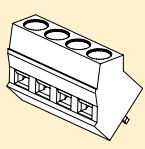
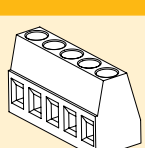
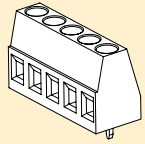
### Physical

Housing:  
Standard Plugs and Headers — Polyamide (Nylon) 6/6  
Surface Mount Compatible Header — Polyamide (Nylon) 4/6  
Housing Color: Black (Green or other colors optional)  
Screw: Steel M2, M2.5, M3  
Contact Plating: Tin (Gold optional)  
Imprinting:  
Standard — 1,2,3  
Reverse — 3,2,1



# 5.00 and 5.08mm (.197 and .200") Pitch ESE Fixed Mount Terminal Blocks



|                                                                                     | Pitch          | Description                                             | Current | Wire Range   | Circuits   | Order No.  |                           |
|-------------------------------------------------------------------------------------|----------------|---------------------------------------------------------|---------|--------------|------------|------------|---------------------------|
|                                                                                     |                |                                                         |         |              |            | ESE        | Beau®                     |
|    | 5.00mm (.197") | Vertical with Rising Cage Clamp                         | 15.0A   | 14 to 22 AWG | 2 to 24    | 39543-30XX | 39890-01XX                |
|    |                | Vertical with Pressure Clamp                            | 10.0A   | 14 to 24 AWG |            | 39543-00XX | 39850-16XX                |
|   |                | Vertical with Pressure Clamp, Low Profile               |         | 14 to 22 AWG |            | 39543-06XX | N/A                       |
|  |                | Horizontal, Assembled to length                         |         | 16 to 24 AWG |            | 39543-31XX | 39890-02XX/<br>39850-31XX |
|  |                | Horizontal, Modular*                                    |         | 2 or 3       | 39543-45XX | N/A        |                           |
|  |                | 45° Wire Entry with Pressure Clamp, Assembled to Length |         | 14 to 24 AWG | 2 to 24    | 39543-02XX | 39850-01XX                |
|  |                | 45° Wire Entry with Pressure Clamp, Modular*            |         |              | 2 or 3     | 39543-05XX | N/A                       |
|  |                | 45° Wire Entry with Rising Cage Clamp                   |         | 14 to 22 AWG | 2 to 24    | 39543-43XX | N/A                       |
|                                                                                     |                |                                                         |         |              |            |            |                           |
|  | 5.08mm (.200") | Vertical with Rising Cage Clamp                         | 15.0A   | 12 to 22 AWG | 2 to 24    | 39544-30XX | 39880-01XX                |

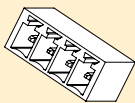
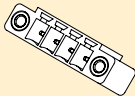
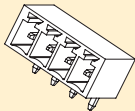
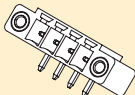
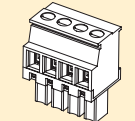
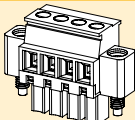
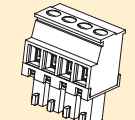
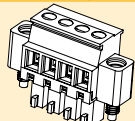
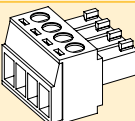
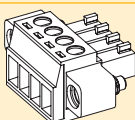
Replace XX with circuit sizes 02 to 24.

\* Modular terminal blocks available in 2 or 3 circuits. Blocks can be stacked together to create larger circuit sizes.



# 3.50mm (.138") Pitch ESE Pluggable Terminal Blocks



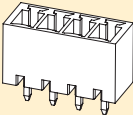
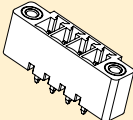
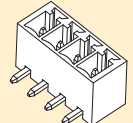
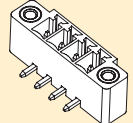
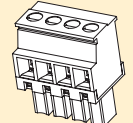
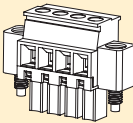
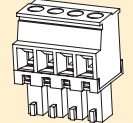
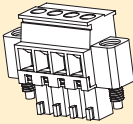
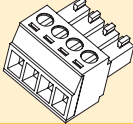
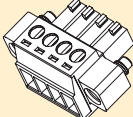
|                                                                                     | Pitch          | Description                                      | Current | Wire Range   | Circuits | Order No.  |            |
|-------------------------------------------------------------------------------------|----------------|--------------------------------------------------|---------|--------------|----------|------------|------------|
|                                                                                     |                |                                                  |         |              |          | ESE        | Beau®      |
| PCB Headers                                                                         |                |                                                  |         |              |          |            |            |
|    | 3.50mm (.138") | Vertical                                         | 8.0A    | N/A          | 2 to 20  | 39501-10XX | 39353-00XX |
|    |                | Vertical with Threaded Retention Inserts         |         |              |          | 39505-10XX | 39354-00XX |
|    |                | Horizontal                                       |         |              |          | 39502-10XX | 39355-00XX |
|  |                | Horizontal with Threaded Retention Inserts       |         |              |          | 39506-10XX | 39356-00XX |
| Plugs                                                                               |                |                                                  |         |              |          |            |            |
|  | 3.50mm (.138") | Vertical, Rear Wire Entry                        | 8.0A    | 16 to 24 AWG | 2 to 20  | 39503-20XX | N/A        |
|  |                | Vertical with Retention Screws, Rear Wire Entry  |         |              |          | 39507-20XX |            |
|  |                | Vertical, Front Wire Entry                       |         |              |          | 39503-30XX |            |
|  |                | Vertical with Retention Screws, Front Wire Entry |         |              |          | 39507-30XX |            |
|  |                | Horizontal                                       |         | 16 to 30 AWG |          | 39500-00XX | 39351-00XX |
|  |                | Horizontal with Retention Screws                 |         |              |          | 39504-00XX | 39352-00XX |

Replace XX with circuit sizes 02 to 20.



## 3.81mm (.150") Pitch ESE Pluggable Terminal Blocks

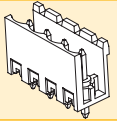
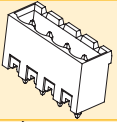
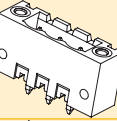
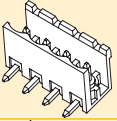
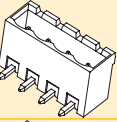
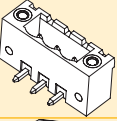
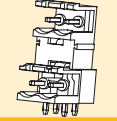
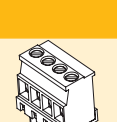
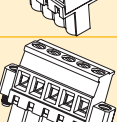
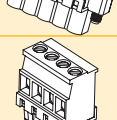
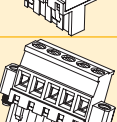
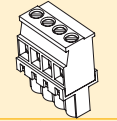
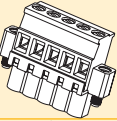
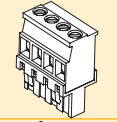
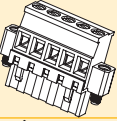
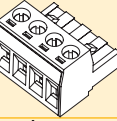
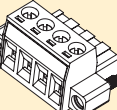


|                                                                                     | Pitch          | Description                                      | Current | Wire Range   | Circuits | Order No.  |            |  |
|-------------------------------------------------------------------------------------|----------------|--------------------------------------------------|---------|--------------|----------|------------|------------|--|
|                                                                                     |                |                                                  |         |              |          | ESE        | Beau®      |  |
| PCB Headers                                                                         |                |                                                  |         |              |          |            |            |  |
|    | 3.81mm (.150") | Vertical                                         | 8.0A    | N/A          | 2 to 20  | 39511-10XX | 39900-05XX |  |
|    |                | Vertical with Threaded Retention Inserts         |         |              |          | 39515-10XX | 39900-11XX |  |
|    |                | Horizontal                                       |         |              |          | 39512-10XX | 39900-07XX |  |
|   |                | Horizontal with Threaded Retention Inserts       |         |              |          | 39516-10XX | 39900-12XX |  |
| Plugs                                                                               |                |                                                  |         |              |          |            |            |  |
|  | 3.81mm (.150") | Vertical, Rear Wire Entry                        | 8.0A    | 16 to 30 AWG | 2 to 20  | 39513-20XX | 39900-02XX |  |
|  |                | Vertical with Retention Screws, Rear Wire Entry  |         |              |          | 39517-20XX | 39900-17XX |  |
|  |                | Vertical, Front Wire Entry                       |         |              |          | 39513-30XX | 39900-03XX |  |
|  |                | Vertical with Retention Screws, Front Wire Entry |         |              |          | 39517-30XX | 39900-18XX |  |
|  |                | Horizontal                                       |         | 16 to 24 AWG |          | 39510-00XX | 39905-01XX |  |
|  |                | Horizontal with Retention Screws                 |         |              |          | 39514-00XX | 39905-10XX |  |

Replace XX with circuit sizes 02 to 20.



# 5.00mm (.197") Pitch ESE Pluggable Terminal Blocks

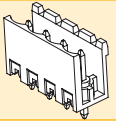
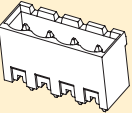
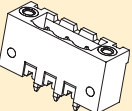
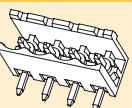
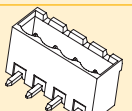
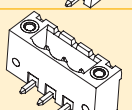
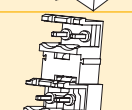
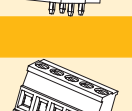
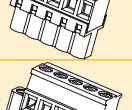
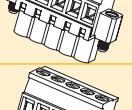
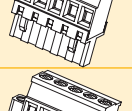
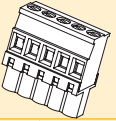
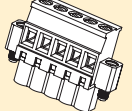
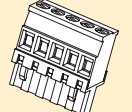
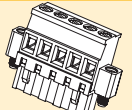
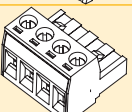
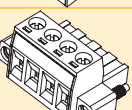
|                                                                                     | Pitch          | Description                                                          | Current | Wire Range   | Circuits | Order No.   |            |            |            |
|-------------------------------------------------------------------------------------|----------------|----------------------------------------------------------------------|---------|--------------|----------|-------------|------------|------------|------------|
|                                                                                     |                |                                                                      |         |              |          | ESE         | Beau®      |            |            |
| PCB Headers                                                                         |                |                                                                      |         |              |          |             |            |            |            |
|    | 5.00mm (.197") | Vertical, Open Ends                                                  | 15.0A   | N/A          | 2 to 24  | 39521-00XX  | 39870-04XX |            |            |
|    |                | Vertical, Closed Ends                                                |         |              |          | 39521-10XX  | 39870-05XX |            |            |
|    |                | Vertical, Surface Mount Compatible                                   |         |              |          | 39521-40XX  | 39870-13XX |            |            |
|    |                | Vertical with Threaded Retention Inserts                             |         |              |          | 39525-00XX  | 39870-11XX |            |            |
|    |                | Vertical with Threaded Retention Inserts, Surface Mount Compatible   |         |              |          | 39525-40XX  | N/A        |            |            |
|   |                | Horizontal, Open Ends                                                |         |              | 4 to 48  | 39522-00XX  | 39870-06XX |            |            |
|  |                | Horizontal, Closed Ends                                              |         |              |          | 39522-10XX  | 39870-07XX |            |            |
|  |                | Horizontal, Surface Mount Compatible                                 |         |              |          | 39522-40XX  | 39870-14XX |            |            |
|  |                | Horizontal with Threaded Retention Inserts                           |         |              |          | 39526-00XX  | 39870-12XX |            |            |
|  |                | Horizontal with Threaded Retention Inserts, Surface Mount Compatible |         |              |          | 39526-40XX  | N/A        |            |            |
|  |                | Dual Level, Open Ends                                                |         |              |          | 39528-00XX* |            |            |            |
| Plugs                                                                               |                |                                                                      |         |              |          |             |            |            |            |
|  | 5.00mm (.197") | Vertical, Rear Wire Entry                                            | 15.0A   | 12 to 26 AWG | 2 to 24  | 39523-20XX  | 39870-02XX |            |            |
|  |                | Vertical with Retention Screws, Rear Wire Entry                      | 10.0A   |              |          | 39527-20XX  | N/A        |            |            |
|  |                | Vertical, Front Wire Entry                                           | 15.0A   |              |          | 39523-30XX  | 39870-03XX |            |            |
|  |                | Vertical with Retention Screws, Front Wire Entry                     | 10.0A   |              |          | 39527-30XX  | N/A        |            |            |
|  |                | Horizontal                                                           | 15.0A   |              |          |             |            | 39520-00XX | 39870-01XX |
|  |                | Horizontal with Retention Screws                                     |         |              |          |             |            | 39524-00XX | N/A        |

Replace XX with circuit sizes 02 to 24.

\*Dual level PCB header available in circuit sizes 04 to 48.



# 5.08mm (.200") Pitch ESE Pluggable Terminal Blocks

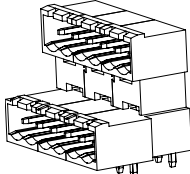
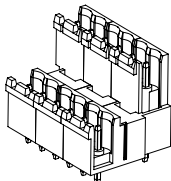
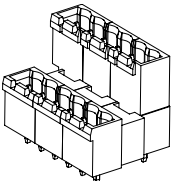
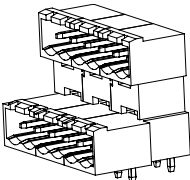
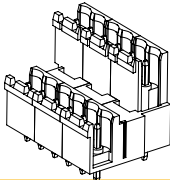
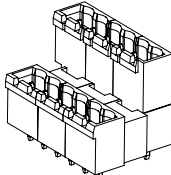
|                                                                                     | Pitch                 | Description                                                          | Current     | Wire Range   | Circuits | Order No.  |            |
|-------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------|-------------|--------------|----------|------------|------------|
|                                                                                     |                       |                                                                      |             |              |          | ESE        | Beau®      |
| PCB Headers                                                                         |                       |                                                                      |             |              |          |            |            |
|    | 5.08mm (.200")        | Vertical, Open Ends                                                  | 15.0A       | N/A          | 2 to 24  | 39531-00XX | 39860-04XX |
|    |                       | Vertical, Closed Ends                                                |             |              |          | 39531-10XX | 39860-05XX |
|    |                       | Vertical, Surface Mount Compatible                                   |             |              |          | 39531-40XX | 39860-13XX |
|    |                       | Vertical with Threaded Retention Inserts                             |             |              |          | 39535-00XX | 39860-11XX |
|    |                       | Vertical with Threaded Retention Inserts, Surface Mount Compatible   |             |              |          | 39535-40XX | 39860-15XX |
|   |                       | Horizontal, Open Ends                                                |             |              | 4 to 48  | 39532-00XX | 39860-06XX |
|  |                       | Horizontal, Closed Ends                                              |             |              |          | 39532-10XX | 39860-07XX |
|  |                       | Horizontal, Surface Mount Compatible                                 |             |              |          | 39532-40XX | 39860-14XX |
|  |                       | Horizontal with Threaded Retention Inserts                           |             |              |          | 39536-00XX | 39860-12XX |
|  |                       | Horizontal with Threaded Retention Inserts, Surface Mount Compatible |             |              |          | 39536-40XX | 39860-16XX |
|  | Dual Level, Open Ends |                                                                      | 39538-00XX* | 39860-08XX   |          |            |            |
| Plugs                                                                               |                       |                                                                      |             |              |          |            |            |
|  | 5.08mm (.200")        | Vertical, Rear Wire Entry                                            | 15.0A       | 12 to 26 AWG | 2 to 24  | 39533-20XX | 39860-02XX |
|  |                       | Vertical with Retention Screws, Rear Wire Entry                      | 10.0A       |              |          | 39537-20XX | N/A        |
|  |                       | Vertical, Front Wire Entry                                           | 15.0A       |              |          | 39533-30XX | 39860-03XX |
|  |                       | Vertical with Retention Screws, Front Wire Entry                     | 10.0A       |              |          | 39537-30XX | N/A        |
|  |                       | Horizontal                                                           | 15.0A       |              |          | 39530-00XX | 39860-01XX |
|  |                       | Horizontal Plug with Retention Screw                                 |             |              |          | 39534-00XX | 39860-10XX |

Replace XX with circuit sizes 02 to 24.

\*Dual level PCB header available in circuit sizes 04 to 48.



# 5.00 and 5.08mm (.197 and .200") Pitch ESE Pluggable Terminal Blocks

|                                                                                     | Pitch          | Description                         | Current | Wire Range | Circuits | Order No.  |            |
|-------------------------------------------------------------------------------------|----------------|-------------------------------------|---------|------------|----------|------------|------------|
|                                                                                     |                |                                     |         |            |          | ESE        | Beau™      |
| PCB Headers                                                                         |                |                                     |         |            |          |            |            |
|    | 5.00mm (.197") | Dual Level, Horizontal, Closed Ends | 15.0A   | N/A        | 4 to 48  | 39528-10XX | N/A        |
|    |                | Dual Level, Vertical, Open Ends     |         |            |          | 39528-20XX |            |
|    |                | Dual Level, Vertical, Closed Ends   |         |            |          | 39528-30XX |            |
|   | 5.08mm (.200") | Dual Level, Horizontal, Closed Ends | 15.0A   | N/A        | 4 to 48  | 39538-10XX | 39860-09XX |
|  |                | Dual Level, Vertical, Open Ends     |         |            |          | 39538-20XX | N/A        |
|  |                | Dual Level, Vertical, Closed Ends   |         |            |          | 39538-30XX |            |

Replace XX with circuit sizes 04 to 48.



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