

# Pico-EZmate™ Harness Assemblies offer an extreme low-profile design for simple and reliable solderless connections to LED Arrays

Molex Pico-EZmate<sup>™</sup> harnesses provide the lowest profile interconnect solution in the Solid State Lighting industry when used with and integrated header feature in select LED arrays. Utilizing proven Pico-EZmate connector technology, the harnesses provide a fast, reliable and extreme low-profile connection.

The Pico-EZmate  $^{\text{\tiny M}}$  harness system minimizes handling of the arrays during installation, greatly reducing the possibility of damaging the LED. Pico-EZmate  $^{\text{\tiny M}}$  harnesses will be offered in three wire gauge configurations and three lengths for a range of initial harness options.

Additional harness designs can be requested. For more information or to contact Molex with specific questions, visit: www.molex.com/link/picoezmateharnesses.html

# Pico-EZmate™ Harness for Integrated LED Arrays

**68801** Pico-EZmate™ Harness



Pico-EZmate™ Harness (Series 68801)

#### **Features and Benefits**

Solderless connection design	Minimizes handling of arrays during installation, greatly reducing the possibility of damage. Eliminates specialized operator training and solder-joint inspection	
Vertical snap-to-mate connection	Enables a fast, easy and reliable connection to the LED array holder	
Low-profile 1.40mm connector height	Provides a slim design for space-limited applications. Minimizes risk of affecting light output	
Positive-lock latching feature	Provides an audible click to confirm a connection	
Gold-plated contacts	Highly reliable, low contact resistance	
Halogen-free UL94V-0	Meets RoHS requirements and is UL-flammability rated	
Multiple wire gauges (28 to 18 AWG, including fused combinations) and length options (152.50, 305.00 and 458.00mm) available	Provides design flexibility	
Proven Pico-EZmate™ receptacle design used in existing harnesses	Utilizes technology proven for mobile applications	

# molex

#### **Specifications**

#### **Reference Information**

Packaging: Bags inside box

UL File No.:

UL1977, UL Wiring Harness Program Mates With: Molex Pico-EZmate™ integral header on Bridgelux\* Vero†

LED Array RoHS: Yes

Halogen Free: Yes

#### **Electrical**

Voltage (max.): 130V Current (max.): 2.8A<sup>‡</sup>

Contact Resistance: 20 milliohms Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 100 Megohms

#### **Mechanical**

Contact Retention to Housing: 4N Mating Force (max.): 18N initial Unmating Force (min.): 4N initial Durability: 10 unmating cycles

Not designed for horizontal mating/ unmating<sup>§</sup>

#### **Physical**

Housing: High-temperature white Nylon Contact: High performance copper alloy

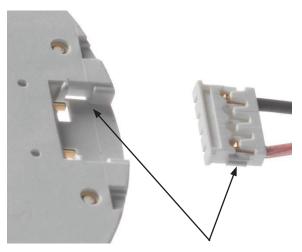
Plating:

Contact Area — Gold Underplating — Nickel

Operating Temperature: -25 to +105°C

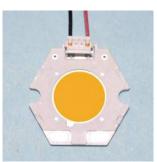
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#### **Features**

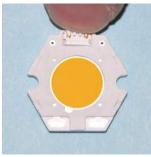


Vertical snap-to-mate connection feature

#### **Easy Two-Step Mating Process**



Step 1. Align



Step 2. Push straight down to connect



Completed Array and Harness Assembly (shown without LED)

<sup>\*</sup> Bridgelux and †Vero are registered trademarks of Bridgelux Inc.

<sup>‡</sup> Pending final testing and qualification of harness assembly; improved voltage result expected.

<sup>§</sup> See Application Specification published at the part number level on Molex.com



#### **Applications**

All general illumination applications

- Downlighting/retail
  - Track
  - Pendants
  - Linear
- Architectural/hospitality
  - Decorative
  - Functional
  - Emergency lighting

#### Area lighting

- Roadway
- Parking Lots
- Wall Packs

Pico-EZmate™ Harness for Integrated LED Arrays

### **Ordering Information**

OrderNo.	Bridgelux* Vero† Arrays	Harness Length (mm)	AWG
68801-4146		152.50	
68801-4147		305.00	28AWG pigtails, strip and retain
68801-4227	Vero† 10	458.00	
68801-4084	Vero† 13	152.50	
68801-4085		305.00	28 AWG fused to 20 AWG pigtails
68801-4228	Vero† 18	458.00	
68801-4226	Vero† 29	152.50	
68801-4225		305.00	28 AWG fused to 18 AWG pigtails
68801-4229		458.00	

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