



**Ideal for OEM light-fixture manufacturers, Molex LED Array Holders simplify the light-fixture installation and achieve industry-leading thermal, electrical and optic performance for next-generation COB arrays by eliminating hand soldering**

Quality issues such as cold solder joints and operator variation arise from hand-soldering arrays to holders. Molex's LED array holders eliminate those issues with compression contacts and provide consistent results when installing LED arrays into fixtures.

**Features and Benefits**

Single-ended Wire Trap terminal (series:180810); double-ended wire trap terminal (series:180580, 180560,180720, rectangular version) to attach power source	Allows for wiring serial or parallel LED sequences, ensuring ease of array assembly. Provides design flexibility by allowing single- or serial-wired LED configurations
Concealed wire trap design	Protects electrical contacts and provides additional voltage isolation when incorporating metal reflectors
Inspired by Zhaga Book 3 standards (50.00mm diameter circular versions)	Promotes standardization with existing LED eco system. Allows manufacturers to upgrade without re-designing their products
Three-finger attachment for LEDiL Angela/Angelina reflectors (order number:180580-0005 only)	Provides, easy alignment and secure attachment
Three-latch bayonet-style reflector attachment for existing Philips Fortimo type reflectors (series:180810 only)	
LED Chip-on-Board (COB) pre-hold feature	Minimizes installation time by allowing LED array to be secured to the holder during final assembly
4.10mm low-profile design	Compact height fits many applications
Robust housing, compression contacts	Ensures stable connection in high-ambient temperatures. Simplifies the LED installation process by eliminating hand soldering. Reduces installation time and quality concerns
Screw-mount attachment method for securing array to heat sink; standardized hole centers on Zhaga-type round versions	Simple attachment reduces fixture manufacturing time
Releasable wire trap for rework or replacement	Allows for field serviceability and upgrade
Highly-reflective white PBT thermoplastic housing	Promotes light output. Enables mechanical stability in high-temperature environments

**LED Array Holders, Dual-Ended Wire Trap**

**180560** LED Array Holder for 15.85 by 15.85mm COB, Rectangular Version

**180580** LED Array Holders for 22.00 by 22.00mm COB, Circular and Rectangular Versions

**180720** LED Array Holder for 23.85 by 23.85mm COB, Rectangular Version

**180810** LED Array Holder for 23.85 by 23.85mm COB, Circular Version with Bayonet Attachment



LED Array Holder for 15.85 by 15.85mm COB (180560-0001) Rectangular Version



LED Array Holder for 22.00 by 22.00mm COB (180580-0004) Circular Version



LED Array Holder for 22.00 by 22.00mm COB (180580-0001) Rectangular Version



LED Array Holder for 22.00 by 22.00mm COB (180580-0005) Circular Version



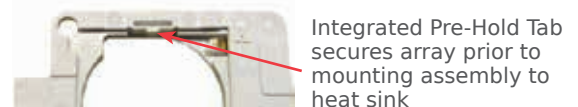
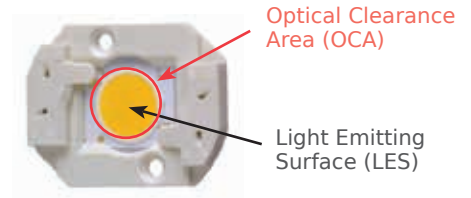
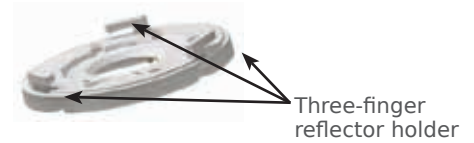
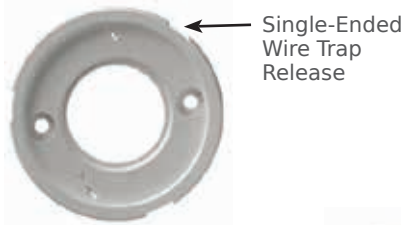
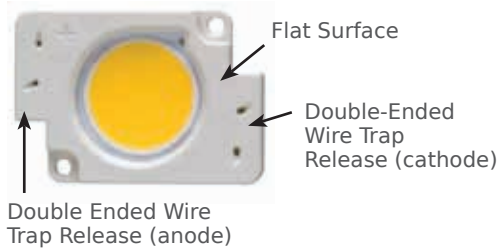
LED Array Holder for 23.85 by 23.85mm COB (Series 180720) Rectangular Version



LED Array Holder for 23.85 by 23.85mm COB (Series 180810) Circular Version

## Additional Product Features

- UL1977 and UL496 OLFB2 lampholder specification approvals help fixture manufacturers certify new fixture designs and more easily obtain agency approvals
- Eliminates the need for solder mounting typically required for LED COB arrays
- Optical Clearance Area (OCA) around the Light Emitting Surface (LES) provides larger space for addition of secondary optics
- Three-finger reflector holder for LEDiL Angela/Angelina reflectors (180580-0005 circular version)
- Flat surface provides a clean and finished look to the LED design and allows for connection of secondary optics
- Flexibility in wiring options; double-ended wire trap allows for wiring in single or in serial configurations



## Product Matrix

15.85 by 15.85mm	22.00 by 22.00mm	22.00 by 22.00mm	22.00 by 22.00mm	23.85 by 23.85mm	23.85 by 23.85mm
<b>33.00mm Length by 26.50mm Width</b>	<b>50.00mm Outer Diameter</b>	<b>50.00mm Outer Diameter</b>	<b>40.10mm Length by 31.00mm Width</b>	<b>50.00mm Outer Diameter</b>	<b>44.00mm Length by 30.50mm Width</b>
Profile Height 4.50mm	Profile Height 4.10mm	Profile Height 4.10mm	Profile Height 4.10mm	Profile Height 4.50mm	Profile Height 4.50mm
Integrated COB LED pre-hold tab available	-	-	-	Integrated COB LED pre-hold tab available	Integrated COB LED pre-hold tab available
Flat-top surfaces and angled light opening	Flat-top surfaces and tight bevels	Flat-top surfaces and tight bevels; three-finger (LEDiL optics) attachments	Non-consistent landing for optics	Three latch bayonet Philips Fortimo type reflector attachment; angled light opening	Flat top surfaces and angled light opening
Heat staked from bottom for smooth topside surface	Heat staked from bottom for smooth topside surface	Heat staked from bottom for smooth topside surface	Visible heat stake marks on the top surface	Heat staked from bottom for smooth topside surface	Heat staked from bottom for smooth topside surface
Space-optimized rectangular design	-	-	-	Zhaga Book 3-inspired 50mm Circular shape, optics landing height and mounting hole pattern	Space-optimized rectangular design
Can be used with a variety of optics/reflectors	Can only be used with LEDiL Angela/Angelina reflectors	Can be used with a variety of optics/reflectors	Can be used with a variety of optics/reflectors	Can be used with a variety of optics/reflectors	Can be used with a variety of optics/reflectors
Can be used with Cree COBs	Can be used with Nichia COBs	Can be used with Nichia COBs	Can be used with Osram Soleriq and Cree COBs	Can be used with Osram Soleriq and Cree COBs	Can be used with Osram Soleriq and Cree COBs

## LED Array Holders, Dual-Ended Wire Trap

## Applications

All general illumination applications

- Downlighting
  - Track
  - Pendants
  - Linear

Area Lighting

- Roadways
- Parking Lots
- Wall Packs



Recessed downlighting in residential and commercial buildings

## LED Array Holders, Dual-Ended Wire Trap

Target Customer Job Functions



## Specifications

### Reference Information

Packaging: Tray

UL File No:

E345583 – Series: 180810,  
180720, 180560

UL496 OLF2 & UL1977 –  
Order No.: 180580-0001

UL Rating Pending – Order No.:  
180580-0004, 180580-0005

CSA File No.:

E345583 – Series: 180810,  
180720, 180560

Pending – Series: 180580

Designed In: Millimeters

RoHS: Yes

REACH SVHC: Contains SVHC: No

### Electrical

Voltage (max.): 600V

Current: 2.5A continuous; 3.5A max.

Contact Resistance:  
20 milliohms max.

Dielectric Withstanding Voltage:  
300V DC

Insulation Resistance:  
5000 Megohms min.

### Mechanical

Wire Insertion Force: 5N max.

Wire Pull Out Force: 30N max.

Durability (min.): 5 Cycles

### Physical

Housing: White PBT 30%

Glass fill UL94V

Contact: Copper Alloy

Plating:

Contact Area — Gold (Au)

Underplating — Nickel (Ni)

## Ordering Information

Order No.	COB Footprint	Version	#Integrated Pre-Hold Tab	Mounting Method	Wire Trap	Releasable Wire Trap	Optical Attachment
<a href="#">180560-0001</a>	15.85 by 15.85mm	Rectangular	No	M2.5 Screw	Double	Yes	Variety of optics/ reflectors
<a href="#">180580-0001</a>	22.00 by 22.00mm		Yes	M3 Screw			
<a href="#">180580-0004</a>		Yes	Single		LEDiL Angela/ Angelina reflectors		
<a href="#">180580-0005</a>		Yes					
<a href="#">180720-0001</a>		23.85 by 23.85mm	Rectangular		No		M2.5 Screw
<a href="#">180720-0002</a>	Yes						
<a href="#">180810-0001</a>	Circular				Philips Fortimo reflectors		

†Note: Integrated pre-hold tab can be available for any version; contact Molex for additional information

[www.molex.com/link/dualendedwiretrap.html](http://www.molex.com/link/dualendedwiretrap.html)