

## PRODUCT SPECIFICATION MOLEX LED HOLDER FOR BRIDGELUX ES ARRAY





<b>REVISION:</b>	ECR/ECN INFORMATION:	TITLE: PRODL	JCT SPECIFICATI	ON	SHEET No.		
2	EC No:SSL2011-0068	MOLEX LED	MOLEX LED HOLDER FOR BRIDGELUX				
Z	DATE:2011/03/15		LED ARRAY				
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:			
PS-180150-000		D. McGowan D. Achammer D. McGo			lowan		

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## 1.0 SCOPE

The Molex LED Holder for the Bridgelux ES Array is an electrical connector and mechanical holder to simplify installation of the Bridgelux ES Array without solder connections. The Holder is available with or without a clear cover to protect the LED Array.

## 2.0 PRODUCT DESCRIPTION

### 2.1 MOLEX LED HOLDER PART NUMBERS

This specification covers the performance requirements and test methods for the following products listed by part numbers:

* 180150-0000	LED Holder Without Cover
* 180150-0001	LED Holder With Cover

### 2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

Dimensions: See sales drawing SD-180150-000. Material: RoHs compliant materials.

### 2.3 SAFETY AGENCY APPROVALS

UL File Number: Pending

### 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

Refer to the appropriate sales drawings, the website Molex.com and other sections of this specification for the necessary referenced documents and specifications.

3.1 SD-180150-000, Bridgelux LED Holder Sales Drawing

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## 4.0 RATINGS

#### 4.1 VOLTAGE

300 Volts DC maximum

#### 4.2 CURRENT

2.5 Amp maximum continuous current3.5 Amp maximum peak current (max. 10% duty cycle)

#### 4.3 TEMPERATURE

Operating: -40°C to +85°C (Recommended), +105°C (MAX.) Non-operating: -40°C to +105°C

#### 4.4 DURABILITY

5 cycles mate/unmate (wire trap interface)

## 5.0 QUALIFICATION

Laboratory condition and sample selection are in accordance with EIA-364-1000.

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PS	5-180150-000	D. McGowan	D. Achammer	D. McG	Gowan	
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## 6.0 PERFORMANCE

### 6.1 MECHANICAL PERFORMANCE

ITEM	TEST CONDITION	REQUIREMENT
CLEAR COVER RETENTION	APPLY STATIC LOAD UNTIL CLEAR COVER SEPARATES FROM HOLDER	MIN. 5 N VERIFY NO DAMAGE
WIRE TRAP COVER RETENSION	APPLY STATIC LOAD UNTIL COVER SEPARATES FROM HOLDER	MIN. 20 N
WIRE RETENTION	APPLY STATIC LOAD UNTIL WIRE SEPARATES FROM HOLDER	MIN. 10 N
DROP TEST	DROP 3 TIMES (3 DIRECTIONS) FROM HEIGHT OF 1 METER ONTO CONCRETE OR EQUIVALENT SURFACE	NO DAMAGE.

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### 6.2 ENVIRONMENTAL PERFORMANCE

	ITEM	TEST CONDITION		REQUIF	REMENT	
	TEMPERATURE LIFE (EIA-364-17)	Fasten Holder to Heats with LED. Insert Wires in Wire Tra Expose 180 hours at 10	sink aps. 5°C	Max. 20 mc Resistanc per In	ohm Contac ce Change terface	t
	TEMPERATURE SHOCK/CYCLIC TEMPERATURE & HUMIDITY (EIA-364-23 & 31)	Fasten Holder to Heats with LED. Insert Wires in Wire Tra Expose to -55/85°C, 3 Minute Dwell, 10 Cycle Expose to Thermal Cycle 25°C/80%RH to 65°C/50%RH. 0.5 Hour Ramp, 1.0 Ho Dwell, 24 Cycles	der to Heatsink th LED. s in Wire Traps. o -55/85°C, 30 vell, 10 Cycles Thermal Cycle 80%RH to c/50%RH. Ramp, 1.0 Hour 24 Cycles		ohm Contac ce Change terface	t
VIBRATION (EIA-364-28)		Fasten Holder to Heats with LED. Insert Wires in Wire Tra Expose to Random 3.7 Vibration, 15 Minutes p Each Axis (X, Y, & Z	ink aps. 1G ber )	Max. 20 mc Resistanc per In	ohm Contac ce Change terface	t
	THERMAL CYCLING (EIA-364-1000)	Fasten Holder to Heats with LED. Insert Wires in Wire Tra Expose to +15/+85°C, Minute Dwell, 500 Cycl	ink aps. 30 les	Max. 20 mohm Contact Resistance Change per Interface		t
	DUST EXPOSURE (EIA-364-91)	Fasten Holder to Heats with LED. Insert Wires in Wire Tra Expose to Dust per El 364-91 Table A.1 (Benig 1 Hr. @ 360 cfm (unmat	iink aps. A- gn). ted)	Max. 20 mohm Contact Resistance Change per Interface		t
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## 7.0 TEST SEQUENCE

#### 7.1 Reliability Test Sequences:





7.1 Reliability Test Sequences (continued):



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