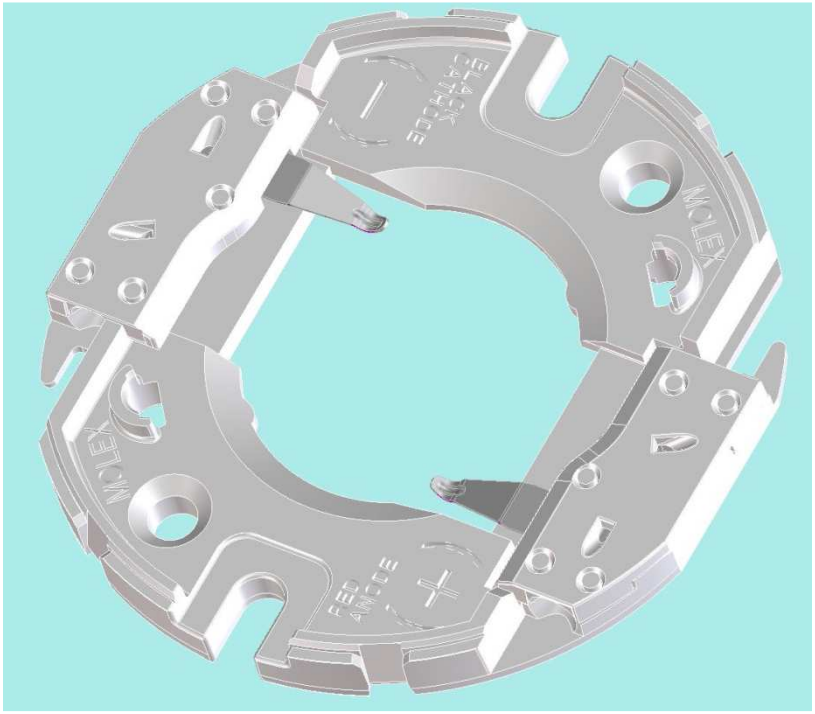
PRODUCT SPECIFICATION
MOLEX LED HOLDER FOR CREE CXA20 ARRAY



REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
1	EC No: SSL2011-0068 DATE: 03/15/2011	PRODUCT SPECIFICATION MOLEX LED HOLDER FOR CREE CXA20 ARRAY	1 of 7

DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
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1.0 SCOPE

The Molex LED Holder for the CREE CXA20 Array is an electrical connector and mechanical holder to simplify installation of the CREE CXA20 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:

* 180220-0000	LED Holder Without Cover
* 180220-0001	LED Holder With Cover

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

Dimensions: See sales drawing SD-180220-000.
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-180220-000, CREE CXA20 Array Holder Sales Drawing

4.0 RATINGS

4.1 VOLTAGE

300 Volts DC maximum

4.2 CURRENT

2.5 Amp maximum continuous current
3.0 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/un-mate (wire trap interface)

5.0 QUALIFICATION

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

6.0 PERFORMANCE

6.1 MECHANICAL PERFORMANCE

ITEM	TEST CONDITION	REQUIREMENT
CLEAR COVER RETENTION	APPLY STATIC LOAD UNTIL CLEAR COVER SEPARATES FROM HOLDER	MIN. 20 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.

6.2 ENVIRONMENTAL PERFORMANCE

ITEM	TEST CONDITION	REQUIREMENT
TEMPERATURE LIFE (EIA-364-17)	Fasten Holder to Heatsink with LED. Insert Wires in Wire Traps. Expose 180 hours at 105°C	Max. 20 mohm Contact Resistance Change per Interface
TEMPERATURE SHOCK/CYCLIC TEMPERATURE & HUMIDITY (EIA-364-23 & 31)	Fasten Holder to Heatsink with LED. Insert Wires in Wire Traps. Expose to -55/85°C, 30 Minute Dwell, 10 Cycles Expose to Thermal Cycle 25°C/80%RH to 65°C/50%RH. 0.5 Hour Ramp, 1.0 Hour Dwell, 24 Cycles	Max. 20 mohm Contact Resistance Change per Interface
VIBRATION (EIA-364-28)	Fasten Holder to Heatsink with LED. Insert Wires in Wire Traps. Expose to Random 3.1G Vibration, 15 Minutes per Each Axis (X, Y, & Z)	Max. 20 mohm Contact Resistance Change per Interface
THERMAL CYCLING (EIA-364-1000)	Fasten Holder to Heatsink with LED. Insert Wires in Wire Traps. Expose to +15/+85°C, 30 Minute Dwell, 500 Cycles	Max. 20 mohm Contact Resistance Change per Interface
DUST EXPOSURE (EIA-364-91)	Fasten Holder to Heatsink with LED. Insert Wires in Wire Traps. Expose to Dust per EIA-364-91 Table A.1 (Benign). 1 Hr. @ 360 cfm (unmated)	Max. 20 mohm Contact Resistance Change per Interface

7.0 TEST SEQUENCE

7.1 Reliability Test Sequences:

Temperature Life

- Initial Low Level Contact Resistance Measurement (LLCR)
- Durability Cycling Treatment 5 Cycles – Wire Trap
- LLCR
- Temperature Life Treatment 180 Hrs. @ 105 C (mated)
- LLCR

Thermal Cycling

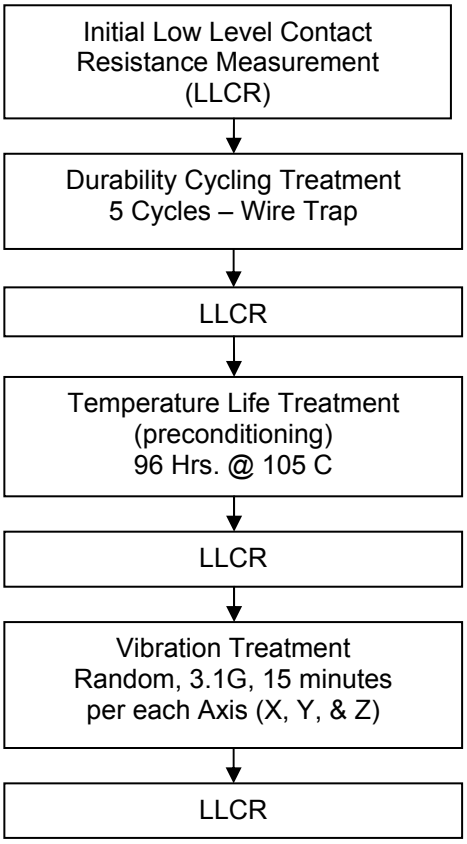
- Initial Low Level Contact Resistance Measurement (LLCR)
- Temperature Life Treatment (preconditioning) 96 Hrs. @ 105 C
- LLCR
- Thermal Cycling Treatment +15/+85 C, 30 min. Dwell 500 Cycles
- LLCR

Temperature Shock/Cyclic Temperature & Humidity

- Initial Low Level Contact Resistance Measurement (LLCR)
- Durability Cycling Treatment 5 Cycles – Wire Trap
- LLCR
- Thermal Shock Treatment -55/+85 C, 30 minute Dwell 10 Cycles
- LLCR
- Cyclic Temperature & Humidity 25°C/80%RH to 65°/50%RH 0.5 Hour Ramp, 1.0 Hour Dwell 24 Cycles
- LLCR

7.1 Reliability Test Sequences (continued):

Vibration



Dust Exposure