

**HLMP-1600, HLMP-1601, HLMP-1620, HLMP-1621,  
HLMP-1640, HLMP-1641, HLMP-3600, HLMP-3601,  
HLMP-3650, HLMP-3651, HLMP-3680, HLMP-3681**  
5V & 12V Resistor Lamp



## Reliability Data Sheet

### Description

The following cumulative test results have been obtained from testing performed at Avago Technologies in accordance with the latest revision of MIL-STD-883 and JEDEC.

Avago tests parts at the absolute maximum rated conditions recommended for the device. The actual performance you obtain from Avago parts depends on the electrical and environmental characteristics of your application but will probably be better than the performance outlined in Table 1.

**Table 1. Life Tests  
Demonstrated Performance**

Colors	Stress Test Conditions	Total Device Hours	Units Tested	Total Failed	Point Typical Performance	
					MTTF (60% Confidence)	Failure Rate (% /1K Hours)
Red	T <sub>A</sub> = 55°C V <sub>F</sub> = 15 V	37,408	84	0	40,800	2.45

**Table 2. Environmental Tests**

Test Name	Reference	Test Conditions	Units Tested	Units Failed
Temperature Cycle	Avago Req.	-40/100°C, 15 min dwell, 5 min transfer, 100 cycles	2668	0
Temperature Humidity Storage Life	Avago Req.	T <sub>A</sub> = 85°C, 85%RH, for 500 hours	28	0
High Temperature Operating Life	JESD22-A108	T <sub>A</sub> = 55°C, V <sub>F</sub> = 15V for 1000 hours	28	0

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