

HLMP-xxxx Series *

T-1 ¾ (5mm), T-1 (3mm),
Rectangular and Bicolor GaP Lamps



Reliability Data Sheet

Description

The following cumulative test results have been obtained from testing performed at Avago Technologies in accordance with the JEDEC Standard.

Avago Technologies tests parts at the absolute maximum rated conditions recommended for the device. The actual performance you obtain from Avago technologies' 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. Reliability Tests

Test Name	JEDEC Reference	Test Conditions	Units Tested	Units Failed
Temperature Cycle	JESD22-A104	-40°C/100°C, 15 mins dwell, 5 mins transfer, 100 cycles	9504	0
High Temperature Operating Life	JESD22-A108	T _A = 55°C, 1000hrs HER, Orange, Green : 30mA	9196	0
		T _A = 55°C, 1000hrs Yellow: 20mA	3612	0
Temperature Humidity Operating Life	JESD 22-A101	T _A = 85°C, RH = 85%RH, 1000hrs HER, Orange, Green : 20mA	6552	0
		Yellow: 10mA	1708	0
Temperature Humidity Storage Life	JESD22-A103	T _A = 85°C, RH = 85%RH, 1000hrs	2128	0
Resistance to Solder heat	JESD22-B106	260±5°C, 10±2 second, 2x	250	0
Solderability	JESD22-B102	8 hours steam aging, 245°C for 5 seconds	30	0

Notes:

1. A failure is any LED that is open, shorted or fails to emit light (except solderability test)

*The reliability data in this document applies to the following part numbers: HLMP-0301, 0401, 0405, 0504, 0800, 0805, 1301, 1321, 1340, 1367, 1389, 1401, 1420, 1421, 1440, 1467, 1468, 1472, 1503, 1520, 1521, 1540, 1554, 1573, 1575, 1576, 1600, 1601, 1620, 1621, 1627, 1640, 1641, 1642, 1700, 1705, 1719, 1721, 1722, 1790, 1794, 3301, 3316, 3351, 3357, 3358, 3366, 3390, 3401, 3416, 3451, 3454, 3479, 3490, 3495, 3507, 3519, 3554, 3557, 3568, 3577, 3579, 3580, 3590, 3595, 3600, 3601, 3623, 3624, 3646, 3647, 3650, 3651, 3674, 3678, 3680, 3681, 3690, 3691, 3707, 3718, 3727, 3736, 3738, 3750, 3762, 3807, 3838, 3839, 3850, 3860, 3861, 3862, 3907, 3914, 3938, 3950, 3960, 3962, 4000, 4015, 4059, 4060, 4062, 4073, 4700, 4719, 4735, 4740, 4748, C215, C223, C315, C323, C349, C415, C423, C492, C493, C494, C515, C523, C549, C575, C576, C615, C649, D272, D401, D578, G242, G243, G343, G540, G543, G598, J283, J284, J287, J299, J345, J346, J352, J353, J353, J353, J353, J356, J359, J361, J369, J380, J383, J387, J390, J596, K204, K206, K207, K229, K270, K273, K285, K314, K334, K343, K346, K353, K358, K367, K384, K401, K440, K461, K462, K463, K464, K465, K467, K477, K479, K503, K506, K514, K525, K526, K532, K556, K575, K584, K600, K640, K644, K645, K671, K672, K675, K774, KE50, N205, N305, N405, N505, S201, S257, S301, S400, S401, S501, S561, Y502

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