

HSMA-C200, HSMC-C200, HSMW-C200

Mono-Color Top-Mount ChipLED

Description

Broadcom tests parts at the absolute maximum rated conditions recommended for the device. The actual performance that you obtain from Broadcom® parts depends on the electrical and environmental characteristics of your application, but will probably be better than the performance outlined in the following table.

Table 1: Reliability Tests

Test Name	Reference	Test Conditions	Units Tested	Units Failed
High Temperature Operating Life	JESD22-A108	T _A = 85°C, I _F = 1 mA for 500 hours	56	0
Low Temperature Operating Life	JESD22-A108	T _A = -40°C, I _F = 5 mA for 500 hours	56	0
Temperature Humidity Operating Life	JEITA ED- 4701/ 100 102	T _A = 60°C, 90% RH, I _F = 2 mA for 500 hours	56	0
Temperature Cycle	JESD22-A104	-40°C/85°C, 15-minute dwell, 5-minute transfer, 100 cycles	336	0
High Temperature Storage Life	JESD22-A103	T _A = 85°C for 500 hours	56	0
Low Temperature Storage Life	JESD22-A119	T _A = -40°C for 500 hours	56	0
Temperature Humidity Storage Life	JEITA ED- 4701/ 100 103	T _A = 60°C, 90% RH for 500 hours	56	0
Mechanical Shock	JESD22-B104	5 shocks each X1, X2, Y1, Y2, Z1, Z2, 1500G, 0.5-ms pulse	28	0
Vibration	JESD22-B103	4 cycles, 4 minutes each X, Y, and Z at 0.06 in. at 20 Hz to 2000 Hz, Peak acceleration 20G	28	0
Solderability	J-STD-002	245°C for 5 seconds	28	0

NOTE: A failure is any LED that is open or shorted or that failed to emit light (except for the Solderability test).

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