

ASMG-PT00

1W Tri-color High Power LED

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 table.

Test Name	Reference	Test Conditions	Units Tested	Units Failed
High Temperature Operating Life	JESD22-A108	$T_S = 105^{\circ}\text{C}$ for 1000 hours (all chips on) Red/Blue: $I_F = 200\text{ mA}$ Green: $I_F = 180\text{ mA}$	40	0
Low Temperature Operating Life	JESD22-A108	$T_S = -40^{\circ}\text{C}$ for 1000 hours (all chips on) Red/Green/Blue: $I_F = 200\text{ mA}$	40	0
Temperature Humidity Operating Life	JEITA ED- 4701/ 100 102	$T_A = 85^{\circ}\text{C}$, 85% RH for 500 hours (all chips on) Red/Green/Blue: $I_F = 200\text{ mA}$	40	0
Temperature Cycle	JESD22-A104	$-40^{\circ}\text{C}/120^{\circ}\text{C}$, 30-minute dwell, 5-minute transfer, 100 cycles	336	0
High Temperature Storage Life	JESD22-A103	$T_A = 120^{\circ}\text{C}$ for 1000 hours	56	0
Low Temperature Storage	JESD22-A119	$T_A = -40^{\circ}\text{C}$ for 1000 hours	56	0
Temperature Humidity Storage Life	JEITA ED- 4701/ 100 103	$T_A = 85^{\circ}\text{C}$, 85% RH for 1000 hours	56	0
Pulse Test	JESD22-A108	$T_S = 25^{\circ}\text{C}$, frequency = 1 kHz, duty factor = 10% for 1000 hours (all chips on) Red/Green/Blue: peak current = 250 mA	40	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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