

HSD9-B170

Top-View Surface-Mount Photodiode

Overview

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.

Table 1: Reliability Tests

Test Name	Reference	Test Conditions	Units Tested	Units Failed
High Temperature Operating Life	JESD22-A108	$T_A = 85^{\circ}\text{C}$, $V_R = 30\text{V}$ for 1000 hours	56	0
Low Temperature Operating Life	JESD22-A108	$T_A = -40^{\circ}\text{C}$, $V_R = 30\text{V}$ for 1000 hours	56	0
Temperature Humidity Operating Life	JEITA ED-4701/100 102	$T_A = 60^{\circ}\text{C}$, RH = 90%, $V_R = 5\text{V}$ for 500 hours	56	0
Temperature Cycle	JESD22-A104	$-40^{\circ}\text{C}/100^{\circ}\text{C}$, 15-minute dwell, 5-minute transfer, 100 cycles	252	0
High Temperature Storage Life	JESD22-A103	$T_A = 100^{\circ}\text{C}$ for 1000 hours	56	0
Low Temperature Storage Life	JESD22-A119	$T_A = -40^{\circ}\text{C}$ for 1000 hours	56	0
Temperature Humidity Storage Life	JEITA ED-4701/100 103	$T_A = 60^{\circ}\text{C}$, RH = 90% for 1000 hours	56	0
Solderability	J-STD-002	245°C for 5 seconds	28	0

NOTE: A failure is any unit that is open, shorted, or that failed to generate photocurrent (except for the Solderability test).

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