

**AREQ-xxC0****3528 PLCC-4 Surface-Mount Infrared LED****Description**

Broadcom tests parts at the absolute maximum rated conditions recommended for the device. The actual performance that you obtain from Broadcom<sup>®</sup> 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	$T_A = 100^\circ\text{C}$ , $I_F = 25\text{ mA}$ for 1000 hours	56	0
Low Temperature Operating Life	JESD22-A108	$T_A = -40^\circ\text{C}$ , $I_F = 100\text{ mA}$ for 1000 hours	56	0
Temperature Humidity Operating Life	JEITA ED-4701/ 100 102	$T_A = 60^\circ\text{C}$ , 90% RH, $I_F = 64\text{ mA}$ for 500 hours	56	0
Temperature Cycle	JESD22-A104	$-40^\circ\text{C}$ to $100^\circ\text{C}$ , 30-minute dwell, 5-minute transfer, 100 cycles	336	0
High Temperature Storage Life	JESD22-A103	$T_A = 100^\circ\text{C}$ 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	$T_A = 60^\circ\text{C}$ , 90% RH for 1000 hours	56	0
Pulse Test	JESD22-A108	$T_A = 25^\circ\text{C}$ , frequency = 100 Hz, peak current = 1A, duty factor = 1% for 1000 hours	56	0
Solderability	J-STD-002	$245^\circ\text{C}$ 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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