

Reliability Data Sheet

Description

The following cumulative test results have been obtained from testing performed in accordance with customer specific requirement. The actual performance customer obtains from Avago parts depends on the electrical and environmental characteristics of application but will probably be better than the performance outlined in Table 1.

Table 1. Life Tests
Demonstrated Performance

Stress Test	Colors	Stress Test Conditions	Total Device Hrs	Units Tested	Units Failed	Point Typical Performance	
						MTBF	Failure Rate (%/1K Hours)
High Temperature Operating Life	HER, Green & Yellow	Ta=+55°C, If = 25mA	31,500	63	0	31,500	<3.17
	AlGaAs	Ta=+55°C, If = 15 mA	10,500	21	0	10,500	<9.52
Low Temperature Operating Life	HER, Green & Yellow	Ta=-40°C, If = 30 mA	31,500	63	0	31,500	<3.17
	AlGaAs	Ta=-20°C, If = 15 mA	10,500	21	0	10,500	<9.52
Wet High Temperature Operating Life	HER, Green, Yellow & AlGaAs	Ta=+85°C, If = 10 mA, R.H = 85%	42,000	84	0	42,000	<2.38

Table 2. Environmental Tests

Test	Reference	Test Conditions	Units Tested	Unit Failed
Temperature Cycle	JESD22-A104	-40/85°C 15 min dwell 5min transfer, 100 cycles	2300	0
Solder Heat Resistance	JESD22-B106	260°C, 10 sec	2300	0
Solderability Test	JESD22-B102	8 hrs steam age, solder dip @ 245°C, 5 seconds	20	0
Humidity Storage	Avago Requirement	85°C, 85% RH, 500 hours	84	0

For product information and a complete list of distributors, please go to our web site: www.avagotech.com