



# Agilent HDSP-501B, HDSP-503B

## 14.2 mm (0.56 inch)

### General Purpose

### Blue Seven Segment Displays

#### Reliability Data Sheet

#### Description

The following cumulative test results have been obtained from testing performed at Agilent Technologies in accordance with the latest revision of MIL-STD-883.

Agilent tests parts at the absolute maximum rated conditions recommended for the device. The actual performance you obtain from Agilent parts depends on the electrical and

environmental characteristics of your application but will probably be better than the performance outlined in Table 1.

**Table 1. Life Tests Demonstrated Performance**

Colors	Stress Test	Stress Test Conditions	Total Device Hrs.	Units Tested	Units Failed	Point Typical Performance	
						MTBF	Failure Rate (% /1K Hours)
Blue	Low Temperature Operating Life	$T_A = -40^{\circ}\text{C}$ $I_F = 30 \text{ mA}$	23,000	23	0	23,000	< 4.34
Blue	High Temp. Operating Life	$T_A = +55^{\circ}\text{C}$ $I_F = 30 \text{ mA}$	23,000	23	0	23,000	< 4.34
Blue	Wet High Temperature Operating Life	$T_A = +85^{\circ}\text{C}$ R.H. = 85% $I_F = 10 \text{ mA}$	23,000	23	0	23,000	< 4.34

**Table 2. Environmental Tests**

Test Name	Reference	Test Conditions	Units Tested	Units Failed
Solder Heat Resistance	Agilent Internal Test	1x wave solder at 245°C for total of 3 seconds and 5 Temperature Cycles @ -55/100°C, 15 min dwell at both extreme conditions, 5 min. transfer time	1000	0
Temperature Cycle	MIL-STD-883 Method 1010	-40°C to +85°C, 15 min. dwell, 5 min. transfer, up to 20 cycles	900	0
Humidity Storage	JIS C 7021 Method B-11	85°C, 85% RH, 1000 Hours	23	0



[www.semiconductor.agilent.com](http://www.semiconductor.agilent.com)

Data subject to change.

Copyright © 2000 Agilent Technologies, Inc.

5980-1770E (6/00)



**Agilent Technologies**

Innovating the HP Way