

39-Bit Battery Backup Multi-Turn Absolute Housed Encoder

Reliability Data Sheet

Description

The following cumulative test results have been obtained from testing performed at Broadcom in accordance with IEC68 standards. Broadcom tests parts at the absolute maximum characteristics of the rated conditions recommended for the device. The actual performance obtained from Broadcom parts in your application depends on the electrical and environmental conditions but will probably be better than the performance outlined in [Table 1](#).

Table 1 Life Tests

Test Name	Reference	Test Conditions	Units Tested	Unit Failed
Dry Heat	IEC60068-2-2	After storage at maximum operation temperature (125°C) for 1000 hours with charge voltage of 5.5V, measured at room temperature.	8	0
Damp Heat Steady State	IEC60068-2-78	Stored in 85°C, RH = 85% for 1000 hours with charge voltage of 5.5V, measured at room temperature.	5	0
Cold Test	IEC60068-2-1	After storage at minimum operation temperature (-40°C) for 1000 hours with charge voltage of 5.5V, measured at room temperature.	3	0

Table 2 Environmental Tests

Test Name	Reference	Test Conditions	Units Tested	Unit Failed
Change of Temperature	IEC60068-2-14Nb	-45°C to 125°C, 30 min dwell time, Ramp rate: 15°C/ min. After 1000 cycles, measured at room temperature.	5	0

Table 3 Electrical Tests

Test Name	Reference	Test Conditions	Units Tested	Unit Failed
Electrostatic Discharge Immunity Test	IEC61000-4-2	Contact discharge at 6 kV at 10 pulses each (system level).	3	0
		Air discharge at 8 kV at 10 pulses each (system level).	3	0
		Measured at room temperature.		

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

Broadcom, the pulse logo, Connecting everything, Avago Technologies, Avago, and the A logo are among the trademarks of Broadcom in the United States, certain other countries and/or the EU.

Copyright © 2017 Broadcom. All Rights Reserved.

The term "Broadcom" refers to Broadcom Limited and/or its subsidiaries. For more information, please visit www.broadcom.com.

Broadcom reserves the right to make changes without further notice to any products or data herein to improve reliability, function, or design.

Information furnished by Broadcom is believed to be accurate and reliable. However, Broadcom does not assume any liability arising out of the application or use of this information, nor the application or use of any product or circuit described herein, neither does it convey any license under its patent rights nor the rights of others.

AS37-H39B-RDS100 – April 12, 2017

