Product Qualification Report

BCR450

Linear LED Driver IC

Description

This product qualification report describes the characteristics of the product with respect to quality and reliability.

The qualification sample selection was done on production lots which were manufactured and tested on standard production processes and meet the defined requirements.

The qualification test results of those products as outlined in this document are based on **JEDEC** for target applications and may reference existing qualification results of similar products. Such referencing is justified by the structural similarity of the products.

Qualification Assessment

Qualified according to **JEDEC Standard** and assessed as PASS

For further information about comparable products, please contact the nearest Infineon Technologies office (www.infineon.com).

BCR450
PG-SC74-6
MSL: 1; 260°C

qualified before 2011

Electrical Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
High Humidity High Temperature Reverse Bias JESD22 A101	H3TRB	Ta=85°C RH=85%	1000 h	7 x 40	0 / 280	PASS
High Temperature Reverse Bias JESD22 A108	HTRB	Ta=150°C	1000 h	4 x 40	0 / 160	PASS
Intermittent Operating Life MIL-STD 750 / Meth.1037	IOL	Ta=70°C	1000 h	1 x 40	0 / 40	PASS
ESD Human Body Model JESD22 A114	HBM	Class 3A 4000 to < 8000V		1 x 12	0 / 12	PASS
ESD Machine Model JESD22 A115	MM	Class C 400 to < 800V		1 x 12	0 / 12	PASS

Environmental Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
Pre-Conditioning J-STD-20/JESD22 A113	PC	MSL and 3 x reflow	-	14 x 25	0 / 350	PASS
Temperature Cycling JESD22 A104	TC*	-55°C to +150°C	1000 cyc	7 x 40	0 / 280	PASS
Unbiased Highly Accelerated Stress Test JESD22 A102	AC*	Ta = 121°C RH = 100 %	96 h	7 x 40	0 / 280	PASS
High Temperature Storage Life JESD22 A103	HTSL	Ta = 150°C Ta = 175°C	1000 h 1000 h	2 x 40 2 x 40	0 / 80 0 / 80	PASS PASS

Notes:
* For SMD devices reliability stress tests performed after pre-conditioning test (PC)

Further abbreviations: MSL - moisture sensitivity level, Qty – quantity, RH – relative humidity, SS – sample size, Ta – ambient temperature

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Document reference

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