Product Qualification Report

BGSA12UGL8

Low Resistance SPDT Antenna Aperture Switch

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

Fully qualified according to **JEDEC** for **Industrial Applications** and assessed as PASS

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

BGSA12UGL8 qualified since 2018
Package: PG-TSLP-8
MSL: 1

Electrical Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/ss	Fail/Qty	Result
Electrical Distribution	ED	-40°C, +25°C, +85°C		3 x 10	0 / 30	PASS
High Temperature Operating Live JESD22 A101	HTOL	Tj=150°C Vdd=Vddmax	1000 h	3 x 77	0 / 231	PASS
High Temperature Strorage JESD22 A103	HTSL	Ta=150°C	1000 h	3 x 45	0 / 135	PASS
Early Life Failure Rate Study	ELFR	Tj=150°C Vdd=Vddmax	48 h	3 x 1000	0 / 3000	PASS
ESD HBM JESD22-A114B / JS-001	HBM	HBM 1C 1000V to < 2000V		1 x 3	0 / 3	PASS
ESD CDM JESD22-C101 / JS-002	CDM	CDM C3 ≥ 1000V		1 x 3	0 / 3	PASS

Environmental Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
Preconditioning J-STD020 / JESD22 A113	PC	Soak acc.MSL1, 3x reflow, 260°C		3 x 50	0 / 150	PASS
Temperature Cycling JESD22 A104	TC	-55°C to +150°C	1000 cyc	3 x 25	0 / 75	PASS
HAST JESD22 A101	HAST	Ta=130°C, RH=85% Vdd=Vddmax	96 h	3 x 25	0 / 75	PASS
uHAST JESD22-A118	uHAST	Ta=130°C, RH=85%	96h	3 x 25	0 / 75	PASS

Mechanical Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
Physical Dimensions JESD B-100	PD			1 x 30	0 / 30	PASS
Solderability J-STD-002	SD			3 x 22	0 / 66	PASS

Notes:

Trademarks
All referenced product or service names and trademarks are the property of their respective owners.

Edition 2016-01-22

Published by

Infineon Technologies AG

81726 München, Germany

© 2018 Infineon Technologies AG.
All Rights Reserved.

Do you have a question about this document?

Email: erratum@infineon.com

Document reference

n.a.

IMPORTANT NOTICE

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenheitsgarantie").

With respect to any examples, hints or any typical values stated herein and/or any information regarding the application of the product, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

In addition, any information given in this document is subject to customer's compliance with its obligations stated in this document and any applicable legal requirements, norms and standards concerning customer's products and any use of the product of Infineon Technologies in customer's applications.

The data contained in this document is exclusively intended for technically trained staff. It is the responsibility of customer's technical departments to evaluate the suitability of the product for the intended application and the completeness of the product information given in this document with respect to such application.

For further information on the product, technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies office (**www.infineon.com**).

WARNINGS

Due to technical requirements products may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by Infineon Technologies in a written document signed by authorized representatives of Infineon Technologies, Infineon Technologies' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.