Product Qualification Report

ISO1I813T

Isoface™

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).

ISO1I813T
PG-TSSOP-48
MSL: 3; 260°C

qualified before 2012

Electrical Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
High Temperature Operating Life JESD22-A108	HTOL	Tj = 125°C V = max voltage	1000 h	3 x 77	0 / 231	PASS
Temperature Humidity Biased JESD22 A101	THB*	Ta = 85°C rh = 85% V = Min voltage	1000 h	3 x 77	0 / 231	PASS
Latch-up JESD78	LU	Class II Level B	-	1 x 6	0 / 6	PASS
ESD (HBM) JESD22-A114	HBM	Class 2 2000V to <4000V	-	-	-	PASS
ESD (CDM) JESD22-C101	CDM	Class IV 1000V and more	-	-	-	PASS

Environmental Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
Pre-conditioning J-STD020 / JESD22 A113	PC	MSL and 3 x reflow / 1 x wave		3 x 231	0 / 691**	PASS
Temperature Cycling JESD22 A104	TC*	-55°C to +150°C	1000 cycles	2 x 77 1 x 76	0 / 229***	PASS
Autoclave JESD22 A102	AC*	Ta = 121°C rh = 100%	96 h	2 x 77 1 x 76	0 / 230	PASS
High Temperature Storage Life JESD22-A103	HTSL	Ta ≥ 150°C	1000 h	3 x 77	0 / 231	PASS

*** Not stress relevant. Damaged at handling resp. removed for ATE verification (pass).*
**** Not stress relevant. Damaged at handling.*

Mechanical Stress Test Results:

Test Description	Abbr.	Condition	Duration	Lots/SS	Fail/Qty	Result
Destructive Physical Analysis	DPA	Samples from AC & TC		3	0 / 5	PASS

Notes:
* For SMD devices reliability stress tests performed after preconditioning test (PC) according to JESD22

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Document reference

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