# Product Quality Information

# nexperia

## **Quality Information for Product Type BSR30**

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#### **Quick reference**

Information	Content
Device Type	BSR30
Ordering Information (12NCs)	9334 181 10115, 9334 181 10135
Qualification Grade	automotive
Package	SOT89
Waferfab	Nexperia DHAM
Assembly	Nexperia ATGD
ESD HBM	no data
ESD MM	no data
Calculated Failure Rate	0.71 FIT
MTBF/MTTF	1.41E+09 hours

### Explanation

Automotive qualified products are in accordance with the AEC-Q101.

Electrostatic Discharge (ESD) tests are performed as described in the AEC-Q101 with each 3 positive and 3 negative pulses for each stress voltage level.

Test considered for FIT calculation: High Temperature Reverse Bias (HTRB, AEC-Q101 Test # 5). The parameters for calculation of FIT and MTBF/MTTF are as follows: Confidence level 60%, junction temperature derated to 55 °C, activation energy 0.7 eV, test time 168 - 1000 hrs.

For discrete semiconductor devices the Mean Time Between Failure (MTBF) is replaced by the Mean Time To Failure (MTTF) acronym. MTTF is calculated from the Intrinsic Failure Rate.

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