

Quality Information for Product Type PESD5V0L5UY

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Quick reference

Information	Content
Device Type	PESD5V0L5UY
Ordering Information (12NCs)	9340 578 03115, 9340 578 03125, 9340 578 03135
Qualification Grade	automotive
Package	SOT363 (TSSOP6)
Waferfab	Nexperia DHAM
Assembly	Nexperia ATSN
ESD HBM	> 8000 V
Calculated Failure Rate	0.52 FIT
MTBF/MTTF	1.92E+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.