

# ICEMOS SUPERJUNCTION MOSFET Product Qualification Reliability Test Report

## ICE8N60D

### Report Description

This report describes the characteristics of the product as it pertains to the device quality and reliability. The samples used for this qualification were taken from production lots that were manufactured and tested using our standard production processes and meet the device specifications.

The qualification test results of the product as outlined in this document are based on recognized industry standard reliability test methods.

### Qualification Assessment

This product has successfully completed all qualification reliability testing to meet the recognized industry standards and is therefore granted “Full Qualification” status from 2025. This reliability report is subject to appropriate updates as required.

For additional information, please contact your IceMOS Sales Representative. ([www.icemostech.com](http://www.icemostech.com)).

ISSUED BY: ICEMOS TECHNOLOGY

**Product:** ICE8N60D  
**Package:** DPAK  
**MSL Level:** MSL-3

Items	Test Description(Abbr.)	Test method.	Stress Condition	Sample Qty.	Electrical Reject	Result
1	Pre-conditioning ( <b>MSL3</b> )	JESD22-020D	Bake : 125C, 24hrs Moisture Soak : 60C,60%RH,40hrs Reflow : 260C, 3times	77pcs*1lot	0/77	PASS
2	Temperature Cycle( <b>TCT</b> )	JESD22-A104	1000 cycles, $\Delta T_j$ -55 to 150°C	77pcs*1lot	0/77	PASS
3	Steady State Gate Bias positive ( <b>HTGB</b> )	Mil-Std. 750 Method 1042-B	1000 hrs, VGS = +24V $T_j = 150^\circ\text{C}$	80pcs*1lot	0/80	PASS
4	Steady State Gate Bias negative ( <b>HTGB</b> )	Mil-Std. 750 Method 1042-B	1000 hrs, VGS = -24V $T_j = 150^\circ\text{C}$	80pcs*1lot	0/80	PASS
5	Steady State Reverse bias ( <b>HTRB</b> )	Mil-Std. 750 Method 1042-A	1000 hrs, VDS = 480V $T_j = 150^\circ\text{C}$	77pcs*1lot	0/77	PASS
6	High Temp High Humidity Reverse Bias ( <b>H3TRB</b> )	Mil-Std. 750 Method 1042-A	1000 hrs, VDS = 100V $T_j = 85^\circ\text{C}$ , RH = 85%	75pcs*1lot	0/75	PASS

### IMPORTANT NOTICE:

Information contained in this report shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples, hints or any typical values stated herein and/or any information regarding the application of the product, IceMOS Technology 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 IceMOS Technology in customer's applications. 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. IceMOS technology will not be responsible for damages of any nature resulting from the use or reliance upon the information contained in this report.