2025

# ICEMOS SUPERJUNCTION MOSFET
## Product Qualification Reliability Test Report

# ICE13N60FP

**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 2012. This reliability report is subject to appropriate updates as required.

For additional information, please contact your IceMOS Sales Representative. (www.icemostech.com).

ISSUED BY: ICEMOS TECHNOLOGY

# ICE13N60FP Reliability Test Report

**Product**: ICE13N60FP
**Package:** TO220 FULLPAK 3L (Isolated)
**MSL Level**: MSL-1

| Items | Test Description(Abbr.) | Test method. | Stress Condition | Sample Qty. | Electrical Reject | Result |
|---|---|---|---|---|---|---|
| 1 | Temperature Cycle(**TCT**) | JESD22-A104 | 1000 cycles, Δ Tj -55 to 150˚C | 77pcs*1lot | 0/77 | PASS |
| 2 | High Temp storage(**HTS**) | Mil-Std. 750 Method 1032 | 500 hrs, Tj = 150˚C | 77pcs*1lot | 0/77 | PASS |
| 3 | Steady State Gate Bias positive (**HTGB)** | Mil-Std. 750 Method 1042-B | 1000 hrs, VGS = +24V Tj = 150˚C | 80pcs*1lot | 0/80 | PASS |
| 4 | Steady State Gate Bias negative (**HTGB)** | Mil-Std. 750 Method 1042-B | 1000 hrs, VGS = -24V Tj = 150˚C | 80pcs*1lot | 0/80 | PASS |
| 5 | Steady State Reverse bias (**HTRB)** | Mil-Std. 750 Method 1042-A | 1000 hrs, VDS = 480V Tj = 150˚C | 77pcs*1lot | 0/77 | PASS |
| 6 | High Temp High Humidity Reverse Bias (**H3TRB**) | Mil-Std. 750 Method 1042-A | 1000 hrs, VDS = 480V Tj = 85˚C, RH = 85% | 80pcs*1lot | 0/80 | PASS |

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