



Report No. APR-25-H0174
Date: Mar. 31, 2026

RENESAS SEMICONDUCTOR RELIABILITY REPORT

SERIES: REXFET-1 80V

DEVICE: Refer to Product List

QUALITY GRADE: Standard

Quality Assurance Div.
Renesas Electronics Corporation

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Table. Reliability test results

Test Items	Reference	Test Conditions	Number of Lots	Number of Samples	Results Failure/Size	Comments
MSL Preconditioning (PC)	JESD22 -A113	MSL1(Moisture Sensitivity Level 1)	3	231	0/693	-
High Temperature Reverse Bias (HTRB)	JESD22-A108	Tj(Tch) = 175C, VDSS Maximum rating, 1000h	3	77	0/231	-
High Temperature Storage Life (HTSL)	JESD22-A103	Ta=175C, 1000h	3	77	0/231	-
Temperature Humidity bias (THB)	JESD22-A101	Ta=85C, RH=85%, VDSS Maximum rating, 1000h	3	77	0/231	*1
Temperature Cycling (TC)	JESD22-A104	Ta=-55C to 150C, 1000cycles	3	77	0/231	*1
Power Cycling (IOL)	JESD22-A122	$\Delta T_c=100C$, 15000cycles	3	77	0/231	*1
Human Body Model ESD (HBM)	JS-001	C=100pF, R=1.5k Ω , See product list for withstand voltage.	1	3	0/3	-
Charged Device Model ESD (CDM)	JS-002	Over 1000V	1	3	0/3	-
Solderability (SD)	M2003 J-STD-002	245C, 5s, Solder coverage $\geq 95\%$	3	10	0/30	-

*1 With preconditioning per JESD22-A113, MSL 1

•It is tested to confirm that all the samples are satisfied with an individual product specification.

Note :

Basically qualification tests were performed using a representative product with the same wafer process and the same package structure.

Table. Product list

APR-25-H0174

No	Product part number	Package Type	HBM withstand voltage
1	RBE011N08R1SZPW#KB0	TOLT	2000V to \leq 4000V
2	RBE013N08R1SZPW#KB0	TOLT	2000V to \leq 4000V
3	RBE013N08R1SZQ4#GB0	TOLL	2000V to \leq 4000V
4	RBE024N08R1SZN6#HB0	SO8-FL(5×6)	2000V to \leq 4000V
5	RBE031N08R1SZN6#HB0	SO8-FL(5×6)	2000V to \leq 4000V
6	RBE056N08R1SZN6#HB0	SO8-FL(5×6)	1000V to \leq 2000V
7	RBE093N08R1SZN2#HB0	μ SO8-FL(3×3)	1000V to \leq 2000V
8	RBE172N08R1SZN2#HB0	μ SO8-FL(3×3)	500V to \leq 1000V
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