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RENESAS SEMICONDUCTOR RELIABILITY REPORT

DEVICE: RAJ240100A20GFP#HC3

APPLICATION: Standard

Quality Assurance Div.
Renesas Electronics Corporation

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Reliability test result

Test Items	Reference	Test Conditions	Results Reject/Size
High Temperature Operating Life	JESD22-A108	Tj = 125 °C, Vcc max, 1000 h	0/22
High Temperature Storage Life	JESD22-A103	Ta = 150 °C, 1000 h	0/22
Temperature Humidity Bias (HAST)	JESD22-A110	Ta = 110 °C, 85% RH, Vcc max, 264 h	0/22
Temperature Cycling	JESD22-A104	Ta = -65 °C to +150 °C, 200 cycles	0/22
Resistance to Soldering Heat	JESD22-A113, J-STD-020	Bake: 125 °C, 24 h Moisture Soak: 30 °C 70% RH, 192 h (JEDEC-MSL3) Reflow: 260 °C peak, 3times	0/22
Solderability	J-STD-002	245 °C, 5 s 95% solder coverage minimum	0/5
Electrostatic discharge (HBM Method)	JS-001	C = 100 pF, R = 1.5 kΩ, ±2000 V	0/3
Electrostatic discharge (CDM Method)	JESD22-C101	±500 V	0/3
Latch-up (I-Test)	JESD78	±100 mA	0/3
Estimated Failure Rate	-	10 FIT or less Prerequisites: Ta = 55 °C, C.L. = 60%	

Reliability test results may include data from family representative products. MSL Preconditioning was performed prior to Temperature Humidity Bias and Temperature Cycling.

The Criteria shall follow the electrical characteristics in Specifications, except for Solderability.

Preconditioning Details: Bake (125 °C, 24 h) -> Moisture Soak (30 °C 70% RH, 192 h) -> Reflow (260 °C peak, 3 times)