



Report APR-22-H0193  
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# RENESAS SEMICONDUCTOR RELIABILITY REPORT

DEVICE: UPC277G2

APPLICATION: Standard

Quality Assurance Division.  
Renesas Electronics Corporation

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## 1.RELIABILITY TEST

No.	ITEM	TEST CONDITION	Test Results (NUMBER OF FAILURE/NUMBER OF SAMPLES)
1	High Temperature Operating Life	Ta=125 °C, Apply rated voltage, 1,000h	0/22
2	Temperature Humidity Bias	Ta=85 °C, 85%RH, Apply rated voltage, 1,000h	0/22
3	Temperature Cycling	Ta=-65 ~ 150 °C, 200 cycles	0/22
4	High Temperature Storage Life	Ta=150 °C, 1,000h	0/22
5	Soldering Heat	Bake: 125°C、24h Moisture Soak:85°C85%RH, 168h(MSL=1) Reflow:260°Cmax、255°Cx30s、3 times)	0/22
6	Solderability	245°C, 5s (Solder wetting area 95% or more)	0/22
7	Electrostatic-Discharge(ESD)HBM	C=100pF, R=1.5k ohm, ±1,000V	0/3
8	Electrostatic-Discharge(ESD)CDM	±500V	0/3
9	Estimated failure rate	Estimated failure rate : 15Fit ·Tj= 55°C ·Ea = 0.7eV ·C.L. = 60%	
<p>Reliability test results may include data from family representative products. MSL Preconditioning was performed prior to Temperature Humidity Bias and Temperature Cycling.</p> <p>&lt;Judgement criteria&gt; Electrical characteristics described in the delivery specification. (Solderability test is excluded.)</p> <p>&lt;Preconditioning Details&gt; 125°C, 24h + 85°C85%RH 168h(JEDEC MSL1) -&gt; Reflow(260°Cmax、255°Cx30s、3 times)</p>			