

Report No. APR-24-H0169 Date: 07/May/2024

## RENESAS SEMICONDUCTOR **RELIABILITY REPORT**

SERIES: PS2561BL-1

DEVICE: PS2561BL-1-A

PS2561BL-1-F3-A PS2561BL-1-V-A PS2561BL-1-V-F3-A

APPLICATION: Standard

**Quality Assurance Division** Renesas Electronics Corporation

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## Reliability test result

PS2561BL-1

Test Items	Reference	Test Conditions	Results Reject/Size
High Temperature Storage Life	JESD22-A103	Ta=150°C, t=1000h	0/22
Temperature Humidity Bias (HAST)	JESD22-A110	Ta=130°C, RH=85%, VCE=80V, t=96h	0/22
High Temperature Operating Life	JESD22-A108	Ta=110°C, IF=Maximum current within Diode Power Dissipation rating, t=1000h	0/22
Unbiased Temperature Humidity (Unbiased HAST)	JESD22-A118	Ta=130°C, RH=85%, t=96h	0/22
Temperature Cycling	JESD22-A104	-40°C~125°C, 850cycles	0/22
Electrostatic discharge (HBM Method)	JS-001	C=100pF, 1.5kΩ, 2000V	0/5
Electrostatic discharge (CDM Method)	JESD22-C101	500V	0/5
Solderability	J-STD-002	245°C,5s Wet area 95% or more	0/22
Resistance to Soldering Heat	JESD22-A113, J-STD-020	Bake: 125°C, 24h Moisture Soak: 85°C85%RH, 168h(MSL=1) Reflow: 260°Cmax, 255°Cx30s, 3times	0/22
Estimated Failure Rate	-	Estimated failure rate: 10Fit Ta= 55°C, Ea=0.7eV, C.L.=60%	

MSL Preconditioning was performed prior to Temperature humidity bias, Unbiased Temperature Humidity and Temperature cycling.

Preconditioning Details: 125°C,24h→85°C,85%RH,168h→Reflow (260°Cmax, 255°Cx30s,3times)

Reliability test results may include data from family representative products. Criteria shall follow the electrical characteristics in Specifications, except for Solderability. However,  $\Delta$ CTR shall be the initial value  $\pm$  50%.