

Report No. APR-24-H0274 Date: Oct.16,2024

## RENESAS SEMICONDUCTOR RELIABILITY REPORT

APPLICATION: Standard

- SERIES: BCR20FM-14LJ
- DEVICE: BCR20FM-14LJ#BG0 BCR20FM-14LJ#BH0 BCR20FM-14LJ#PH1 BCR20FM-14LJA8#BH0 BCR20FM-14LJAS#BH0

Quality Assurance Div. Renesas Electronics Corporation

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## 1.RELIABILITY TEST

ITEM	TEST CONDITION	Test Results	
		NUMBER OF SAMPLES	NUMBER OF FAILURE
Soldering Heat	Lead Solder DIP (260°Cmax, 10s)	22	0
Solderability	245℃, 5s (Solder wetting area 95% or more)	22	0
High Temperature Bias	Ta=150℃, V <sub>DRM</sub> =Maximum Rating (AC-peak), 1,000h	22	0
Continuous Operation	Tj=150℃, I <sub>T(RMS)</sub> =Maximum Rating, 1,000h	22	0
High Temperature Storage Life	Ta=150℃, 1,000h	22	0
Temperature Humidity Storage	Ta=85℃, 85%RH, 1,000h	22	0
Temperature Cycle	Ta=-40℃ to +150℃, 200cycles	22	0
Electrostatic- Discharge(ESD)HBM	C=100pF, R=1.5k ohm, ±1,000V	3	0
Estimated failure rate	Estimated failure rate : 10Fit or less $\cdot$ Tj= 55° $\cdot$ Ea = 0.7eV $\cdot$ C.L. = 60%		
Reliability test results m	hay include data from family representative products.		
(Solderability test is ex $I_{DRM}$ , $V_{TM}$ , $V_{FGT1}$ , $V_{RGT1}$ , $V_{RG$			