

Report No. APR-23-H0275 Date: Sep.5,2023

RENESAS SEMICONDUCTOR RELIABILITY REPORT

APPLICATION: Standard

- SERIES: CR5AS-12A
- DEVICE: CR5AS-12A-A1#B00 CR5AS-12A-A1#C03 CR5AS-12A-AA1#B00 CR5AS-12A-BA1#B00 CR5AS-12A-BTL#B00 CR5AS-12A-CA1#B00 CR5AS-12A-DA1#B00 CR5AS-12A-EA1#B00 CR5AS-12A-T13#B00 CR5AS-12A-T13#B01 CR5AS-12A-T13#C01 CR5AS-12A-T13#C02 CR5AS-12A-T13#C04 CR5AS-12A-T13#C06 CR5AS-12A-T23#B00 CR5AS-12A-T23#B01

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1.RELIABILITY TEST

ITEM	TEST CONDITION	Test Results	
		NUMBER OF SAMPLES	NUMBER OF FAILURE
Soldering Heat	Reflow(260℃max,255℃×10s, 2times)	22	0
Solderability	245℃, 5s (Solder wetting area 95% or more)	22	0
High Temperature Bias	Ta=125°C, V _{DRM} =Maximum Rating (AC-peak), 1,000h	22	0
Continuous Operation	Tj=125℃, I _{T(AV)} =Maximum Rating, 1,000h	22	0
High Temperature Storage Life	Ta=125℃, 1,000h	22	0
Temperature Humidity Storage	Ta=85℃, 85%RH, 1,000h	22	0
Temperature Cycle	Ta=-40℃ to +125℃, 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 •Tj= 55°C •Ea = 0.7eV •C.L. = 60%		
Reliability test results m	nay include data from family representative products.		
<judgement criteria=""> Electrical characteristic (Solderability test is ex I_{RRM}, I_{DRM}, V_{TM}, V_{GT}, I_{GT} *However, I_{GT} item free</judgement>			