

RENESAS SEMICONDUCTOR RELIABILITY REPORT

APPLICATION: Standard

SERIES: BCR40RM-12LB

DEVICE: BCR40RM-12LB#B00
BCR40RM12LBF14#B00

Reliability & Failure Analysis Department
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℃max, 10s)	22	0
Solderability	245℃, 5s (Solder wetting area 95% or more)	22	0
High Temperature Bias	Ta=150℃, V _{DRM} =Maximum Rating (AC-peak), 1,000h	22	0
Continuous Operation	Tj=150℃, I _{T(RMS)} =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 ・Tj= 55℃ ・Ea = 0.7eV ・C.L. = 60%		
Reliability test results may include data from family representative products.			
<Judgement criteria> Electrical characteristics described in the delivery specification. (Solderability test is excluded.) I _{DRM} , V _{TM} , V _{FGT1} , V _{RGT1} , V _{RGT3} , I _{FGT1} , I _{RGT1} , I _{RGT3} *However, I _{FGT1} , I _{RGT1} , I _{RGT3} is I _{GT} item free judgment.			