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RENESAS SEMICONDUCTOR RELIABILITY REPORT

APPLICATION: Standard

SERIES: BCR16LM-12LA

DEVICE: BCR16LM-12LA#B00

BCR16LM-12LA#C01

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=125℃, V _{DRM} =Maximum Rating (AC-peak), 1,000h | 22 | 0 |
| Continuous Operation | Tj=125℃, $I_{T(RMS)}$ =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 $^{\circ}$ C to +125 $^{\circ}$ C, 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.)

$$\begin{split} &I_{\text{DRM}},\,V_{\text{TM}},\,V_{\text{FGT1}},\,V_{\text{RGT1}},\,V_{\text{RGT3}},\,I_{\text{FGT1}},\,I_{\text{RGT1}},\,I_{\text{RGT3}}\\ * &\text{However,}\,\,I_{\text{FGT1}},\,I_{\text{RGT1}},\,I_{\text{RGT3}}\,\text{is}\,\,I_{\text{GT}}\,\text{item free judgment.} \end{split}$$