

# Reliability Report

Isahaya Electronics Corporation  
Quality Assurance Department

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Doc. No. IRC-JFET-2E-A

## 1. Reliability Test Results

Group	Test Items	Test Conditions	Test Quantity	Failure Quantity	Remarks
1	Solderability	Solder Temperature 230°C Immersion Time 5sec Using rosin-type flux	45	0	
2	Resistance to solder heat	Solder Temperature 260°C Immersion Time 10sec Immersing 1.5mm to the root of leads	22	0	
3	Whisker	60°C, 90%RH, 4000hr	20	0	
		-40°C, 85°C, 30 min each, 1500 cycles			
		Room Temperature 8760hr			
4	Temperature Cycle	Ta=Tstg(min)~Tstg(max) 30min each cycle 100 cycles	45	0	
5	Humidity Resistance	Ta=85°C, 85%RH 1000hr	45	0	
6	High Temperature Storage	Ta=Tstg(max) 1000hr	45	0	
7	High Temperature Reverse Bias	Ta=Tstg(max) VGD=VGDO(max) 1000hr	45	0	
8	Pressure Cooker Test	121°C, 100%RH, 2 × 10 <sup>5</sup> Pa 96hr	45	0	
9	Operation life test	Ta=25°C PT=PT(max) 1000hr	45	0	
10	Terminal Strength	2.45N, 90° , Bending twice	22	0	

## 2. Failure Criteria

Group	Failure Criteria	
1	Less than 95% of the immersed part is covered with solder.	
3	50μ m or more	
10	An abnormality is observed such as broken lead.	
2, 4~9	Measurement items	Failure Criteria
	V(BR)GDO	Which does not meet the electrical characteristics. Whose change rate exceeds ±20%.
	IGSS IDSS	Which does not meet the electrical characteristics.
	Visual Check	An apparent change in appearance is observed.

Measurement conditions are based on the corresponding specification sheet.

For further information of the contents above, please contact our Business Department.