

Product	LED
Package	SMD
Series	SML-D13FW

## 1. 試験結果 (Test Result)

試験項目 Test Items	参考規格 Reference STD	試験条件 Test Condition	n (pcs)	Pn (pcs)
半田耐熱 Solder Heat Resistance for Reflow Soldering	J-STD-020D-01	前処理 : 30°C/70%RH 168hr リフローピーク温度 : 260°C 10秒 220°C以上60秒 プレヒート : 140°C~180°C 60秒 リフロー回数 : 2回 Prtreatment : Temperature Humidity Strage (30°C/70%RH/168hr) Reflow Peak Temp. : 260°C 10sec Over 220°C/60sec Preheat : 140 to 180°C 60sec Repeat for 2 cycles	22	0
半田付性 Solderbility	JESD22-B102E	ロジン系フラックスに5±1秒浸漬し、245±5°CのPbフリー半田槽で製品裏面を3±0.5秒浸漬 Immerse into rosin flux for 5±1sec, and the device for 3±0.5sec into Pb-free solder bath at 245±5°C	22	0
落下 Free Drop	JEITA ED-4701 A-124	高さ: 75cm 楓板上: 3回 H=75cm Maple Board: 3 times	22	0
振動 Vibration	JEITA ED-4701 A-121	100~2000Hz 98.1m/s <sup>2</sup> X,Y,Zの各方向 2時間 100~2000Hz 98.1m/s <sup>2</sup> 2hours each on each direction of X,Y,Z	22	0
温度サイクル Thermal Cycle	JESD22-A104E	Ta=Tstg Min.°C(30min.) ~ Tstg Max.°C(30min.)100cycle	22	0
高温放置 High Temperature Strage	JESD22-A103E	Ta=Tstg Max.+5°C/-0°C 1000hrs	22	0
高温高湿放置 High Temperature High Humidity Strage	JEITA ED-4701 B-121	Ta=85±2°C 85±5%RH 240hrs	22	0
低温放置 Low Temperature Strage	JESD22-A119A	Ta=Tstg Min.±5°C 1000hrs	22	0
動作寿命 Load Life	JESD22-A108D	Ta=25±5°C IF=IFMAX 1000hrs	22	0

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## 2. 測定項目及び故障判定基準 (Failure Criteria)

測定項目 Items	測定条件 Condition	故障判定基準 Criteria
光度 Luminous Intensity	IF=20mA	初期値の60% 60% of the initial value
順方向電圧 Forward Voltage	IF=20mA	初期値に対する変化率±10% Changing rate of ±10%
逆方向電流 Reverse Current	VR=VR Max.	規格最大値 Maximum of specification
外観 Physical	目視 Visual Check	著しい変化のないこと No outstanding change in physical

*1	半田付性 Solderbility	電極部の95%以上が半田で覆われていること More than 95% of the electrode must be covered with solder.
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※当データは、特定Lotの実力値であり保証値ではありません。  
※This data is actual value from specific lot and is not guaranteed.

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