

## 信頼性試験結果/Reliability Test Result

| Product | LED           |
|---------|---------------|
| Package | LAMP          |
| Series  | SLA560_B/E_CT |

1 試験結果(Test Result)

| _1.試験結果(lest)          | Result)       |  |       |       | _  |
|------------------------|---------------|--|-------|-------|----|
| 試験項目                   | 参考規格          | 試験条件   | n     | Pn    |    |
| Test Items             | Reference STD |  | (pcs) | (pcs) |    |
| 半田耐熱                   | JESD22-B106D  | 260±5℃のPbフリ−半田槽に   |       |       |    |
|                        |               | 端子根元0mmまで10±1秒浸漬   | 22    | 0     |    |
| Solder Heat Resistance |               | Immerse the reverse side of the device on the surface  | 22    | I     |    |
| for Reflow Soldering   |               | of Pb−free solder bath at 260±5°C for 10±1sec  |       |       |    |
| 半田付性                   | JESD22-B102E  | ロシン系フラックスに5±1秒浸漬し、245±5℃の  |       |       |    |
| Solderbility           |               | Pbフリー半田槽で製品裏面を3±0.5秒浸漬   | 22    | 0     | *1 |
|                        |               | Immerse into rosin flux for 5±1sec,and the device  | 22    | I     | "' |
|                        |               | for 3±0.5sec into Pb-free solder bath at 245±5°C   |       |       |    |
| 落下                     | JEITA ED-4701 | 高さ:75cm 楓板上:3回   | 22    | 0     |    |
| Free Drop              | A-124         | H=75cm Maple Boad : 3 times  | 22    |       |    |
| 振動                     | JEITA ED-4701 | 100~2000Hz 98.1m/S <sup>2</sup> X,Y,Zの各方向 2時間  |       |       |    |
| Vibration              | A-121         | 100∼2000Hz 98.1m/S <sup>2</sup>  | 22    | 0     |    |
|                        |               | 2hours each on each direction of X,Y,Z   |       |       |    |
| 端子引張強度                 | JESD22-B105D  | 荷重:10N(1Kgf) 30秒   | 22    | 0     |    |
| Lead Pull Test         |               | Load:10N(1Kgf) 30sec   | 22    |       |    |
| 端子折曲げ強度                | JESD22-B105D  | 荷重:1.25N(0.125Kgf) 0°~90°~0°~-90°~0°   | 22    | 0     |    |
| Lead Bend Test         |               | Load: 1.25N(0.125Kgf) $0^{\circ} \sim 90^{\circ} \sim 0^{\circ} \sim -90^{\circ} \sim 0^{\circ}$ | 22    | l o   |    |
| 温度サイクル                 | JESD22-A104E  | Ta=Tstg Min.°C(30min.) ~ Tstg Max.°C(30min.)100cycle   | 22    | 0     |    |
| Thermal Cycle          |               |  | 22    |       |    |
| 高温放置                   | JESD22-A103E  | Ta=Tstg Max.+5°C/-0°C 500hrs   |       |       |    |
| High Temperature       |               |  | 22    | 0     |    |
| Strage                 |               |  |       |       |    |
| 高温高湿放置                 | JEITA ED-4701 | Ta=85±2°C 85±5%RH 240hrs   |       |       |    |
| High Temperature       | B-121         |  | 22    | 0     |    |
| High Humidity Strage   |               |  |       |       |    |
| 低温放置                   | JESD22-A119A  | Ta=Tstg Min.±5°C 500hrs  |       |       |    |
| Low Temperature        |               |  | 22    | 0     |    |
| Strage                 |               |  |       |       |    |
| 動作寿命                   | JESD22-A108D  | Ta=25±5°C IF=20mA 500hrs   | 22    | 0     |    |
| Load Life              |               |  | 22    |       |    |
|                        |               |  |       |       |    |

2 測定項目及び故障判定其準(Failure Criteria)

| _2.測正項日及O的厚刊正基準(Failure Criteria) |              |                                   |  |  |
|-----------------------------------|--------------|-----------------------------------|--|--|
| 測定項目                              | 測定条件         | 故障判定基準                            |  |  |
| Items                             | Condition    | Criteria                          |  |  |
| 光度                                | 20mA         | 初期値の60%                           |  |  |
| Luminous Intensity                | ZOIIIA       | 60% of the initial value          |  |  |
| 順方向電圧                             | 20mA         | 初期値に対する変化率±10%                    |  |  |
| Forward Voltage                   | ZOIIIA       | Changing rate of $\pm 10\%$       |  |  |
| 逆方向電流                             | VR=VR Max.   | 規格最大値                             |  |  |
| Reverse Current                   | VN-VN Wax.   | Maximum of specification          |  |  |
| 外観                                | 目視           | 著しい変化のないこと                        |  |  |
| Physical                          | Visual Check | No outstanding change in physical |  |  |

| _  |              |   |
|----|--------------|---|
| *1 | 半田付性         | 電極部の95%以上が半田で覆われていること                                       |
|    | Solderbility | More than 95% of the electrode must be covered with solder. |

<sup>※</sup>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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