

## 信頼性試験結果/Reliability Test Result

Product	LED
Package	SMD
Series	MSL0104RGB_U/W

1 試験結果(Test Result)

<u>1.試験結果(Test</u>					_
試験項目	参考規格	試験条件	n	Pn	
Test Items	Reference STD	Test Condition	(pcs)	(pcs)	
半田耐熱 Solder Heat Resistance for Reflow Soldering	J-STD-020D-01	前処理 :30°C/70%RH 72hr リフローヒーク温度:260°C 10秒 220°C以上60秒 プレート :140°C~180°C 60秒 リフロー回数 :2回 Prtreatment: Temperature Humidity Strage (30°C/70%RH/72hr) 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℃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℃	22	0	*1
落下 Free Drop	JEITA ED-4701 A-124	高さ:75cm 楓板上:3回 H=75cm Maple Boad:3 times	22	0	
振動 Vibration		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 U:1000hrs / W:500hrs	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 U:1000hrs / W:500hrs	22	0	
動作寿命 Load Life	JESD22-A108D	Ta=25±5°C IF=20mA U:1000hrs / W:500hrs <単色点灯とする>	22	0	

## 2 測定項目及び故障判定基準(Failure Criteria)

2.则足均日及00以四刊足至年	(Tallure Officeria)	
測定項目	測定条件	故障判定基準
Items	Condition	Criteria
光度 IF=20mA		初期値の60%
Luminous Intensity	II -ZOIIIA	60% of the initial value
順方向電圧	IF=20mA	初期値に対する変化率±10%
Forward Voltage	II -ZOIIIA	Changing rate of $\pm 10\%$
逆方向電流	VR=VR Max.	規格最大値
Reverse Current	VIN-VIN Max.	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.	l

<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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