

Product	LED
Package	SMD
Series	SML-P11 * T(R)

## 1.試験結果(Test 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 Solder Heat Resistance for Reflow Soldering	J-STD-020D-01	前処理 :30°C/70%RH 168hr リフロービーク温度 :260°C 10秒 220°C以上60秒 フ <sup>°</sup> 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		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	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	1
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	1

## 2.測定項目及び故障判定基準(Failure Criteria)

測定項目	測定条件	故障判定基準		
Items	Condition	Criteria		
光度	IF=1mA	初期値の60%		
Luminous Intensity	11 - 1111A	60% of the initial value		
順方向電圧	IF=1mA	初期値に対する変化率±10%		
Forward Voltage		Changing rate of $\pm 10\%$		
逆方向電流	VR=VR Max.	規格最大値		
Reverse Current	VR-VR 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.

 ※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。

 $\ensuremath{\mathscr{K}}\xspace$  This data is actual value from specific lot and is not guaranteed.

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