

## 信頼性試験結果/Reliability Test Result

Product	LED
Package	SMD
Series	SML-D12 * 8W

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1.試験結果(Test		= h T \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		_	-
試験項目	参考規格	試験条件	n	Pn	
Test Items	Reference STD		(pcs)	(pcs)	4
半田耐熱	J-STD-020D-01				
		リフローピ−ク温度 :260°C 10秒 220°C以上60秒			
		プ <sup>ル</sup> レヒート :140°C~180°C 60秒			
		リフロー回数 :2回	22	0	
Solder Heat Resistance		Prtreatment : Temperature Humidity Strage			
for Reflow Soldering		(30°C/70%RH/168hr)			
		Reflow Peak Temp. : 260°C 10sec Over 220°C/60sec			
N/ FF / Lb/		Preheat: 140 to 180°C 60sec Repeat for 2 cycles			4
半田付性	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	22	0	*1
Solderbility		Immerse into rosin flux for 5±1sec,and the device			
**		for 3±0.5sec into Pb-free solder bath at 245±5°C			4
落下		高さ:75cm 楓板上:3回	22	0	
Free Drop	A-124	H=75cm Maple Boad : 3 times			4
振動		100~2000Hz 98.1m/s <sup>2</sup> X,Y,Zの各方向 2時間	0.0		
Vibration	A-121	100~2000Hz 98.1m/s²	22	0	
'日本リ/5"		2hours each on each direction of X,Y,Z			4
温度サイクル	JESD22-A104E	Ta=Tstg Min.°C(30min.) ~ Tstg Max.°C(30min.)100cycle	22	0	
Thermal Cycle	150500 44005	T. T. M. 1500 / 000 1000			4
高温放置	JESD22-A103E	Ta=Tstg Max.+5°C/-0°C 1000hrs	00		
High Temperature			22	0	
Strage	JETTA ED 4704	T 05 1 0°0 05 1 5°/511 0 401			4
高温高湿放置		Ta=85±2°C 85±5%RH 240hrs	00		
High Temperature	B-121		22	0	
High Humidity Strage	JEODOO 44404	T -T - M: + 5°0 + 1000!			-
低温放置	JESD22-A119A	Ta=Tstg Min.±5°C 1000hrs	00		
Low Temperature			22	0	1
Strage 動作主会	JEODOO 44005	T -05   5°0   15-15MAY 1000			-
動作寿命	JESD22-A108D	Ta=25±5°C IF=IFMAX 1000hrs	22	0	
Load Life					

## 2 測定項目及び故障判定其準(Failure Criteria)

<u> 2. 別化均日及い以降刊化基件</u>	(Fallure 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		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	11 -20111A	Changing rate of $\pm 10\%$
逆方向電流	VR=VR Max.	規格最大値
Reverse Current	VK-VK 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	ĺ
	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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