

**EVERLIGHT Electronics Co., Ltd.**

Attn: No.6-8, Zhonghua Road, Shulin Dist., New
Taipei City, 23860, Taiwan

PHONE:

FAX:

☒ **PRODUCT/PROCESS CHANGE NOTIFICATION**

☐ **PRODUCT TERMINATION NOTIFICATION**

PCN tracking number: **PCN20251106-07 - CN25100019**

DATE: 29/10/2025

Contact: Bill Lai

Title: PM

E-mail:

Phone:

Fax: +

Product influenced: ☒ Major change ☐ Minor change

Product Identification: (e.g., affected supplier part number(s), affected product lines including specific package types, product family):

IRM-23 series products

Customer part number(s) (optional, if not required per agreed to customer criteria):

N/A

Method, if applicable, of identifying changed product:

There are differences in the appearance.

Reason for change(s):

☐ Products Package Outline Dimension

☐ Electrical/Optical Specification

☒ Material: Raw Material

☐ Equipment

☐ Data Sheet

☐ Packing:

☐ Other:

Detailed description:

To ensure shipments as planned, Everlight introduces new chip.

Anticipated (positive and negative) impact on form, fit, function, quality, or reliability:

please see the comparison report before and after product changes for details.

Supplier Qualification plan schedule and/or results, where applicable:

N/A

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Forecasted key milestones	Date
Date, if required, when qualification samples are available	12.11.2025
Date, if required, when final qualification data are available	06.11.2025
Proposed First Ship Date for change	29.04.2026
Last buy date	29.04.2026
Execution date	29.04.2026
Customer acknowledgement of receipt within 30 days of delivery of the PCN:	
Customer: Name/Date: Title:	☐ Approval for shipments before effective date E-mail/Address: Phone/Fax:
Customer Comments:	
EVERLIGHT acknowledgement of receipt: RECORD BY: DATE:	

The document of individual PCN information will be retained for a minimum of 5 years.

新舊PD比較報告

www.everlight.com

EVERLIGHT

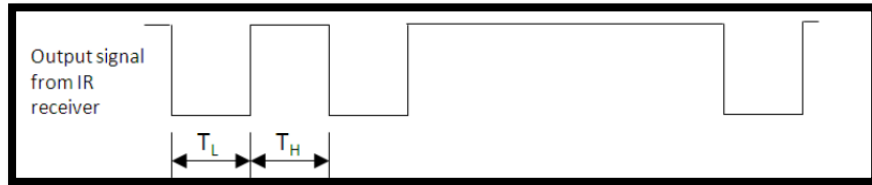
測試項目

- 接收距離測試方法
- 無光干擾接收距離測
- 光干擾接收距離測試

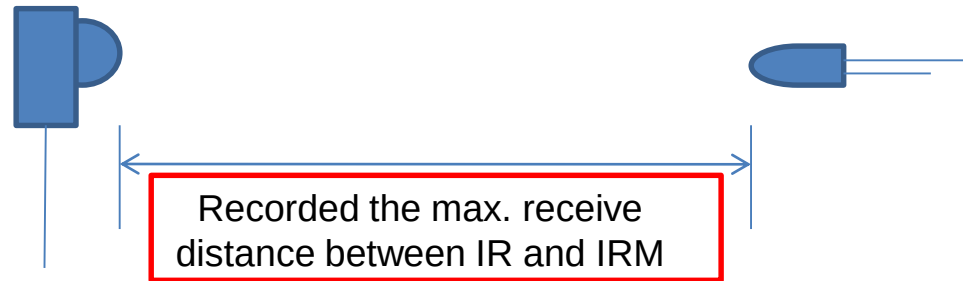
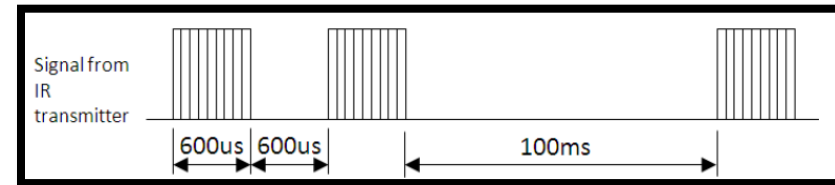
接收距離測試方法

Test Condition:

Receiving signal of IRM



Transmission signal of IR



- Transmission signal of IR
 - The transmission signal of IR consists of 10 bursts and gaps, each 600us with 38kHz carrier frequency. After the 10 bursts and gaps a pause time of 100ms follows.
- Receive signal of IRM
 - A valid receive signal of IRM is given as long as the output pulse width T_L and T_H are within 450us to 750us. The max. distance is recorded when the signal reaches the boundary of 450us or 750us. The signal radiant intensity is 1 mW/sr.

規格書接收距離 (0° > 14m , 45° > 7m)

Electro-Optical Characteristics (T_a=25°C, V_{cc}=5V)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Max Reception range	L _{0max}	14	20	---	m
	L _{45max}	7	10	---	

無干擾接收距離測試

Unit : m

品名	-60°	-45°	-30°	-15°	0°	15°	30°	45°	60°
新晶片2	9.57	11.36	15.92	20.30	21.65	20.39	16.73	11.63	10.46
新晶片1	8.7	11.6	15.8	20.8	22.6	20.8	15.9	9.8	8.7
現有晶片	9.57	9.57	14.49	19.23	21.02	19.68	14.58	9.57	9.21

光干擾接收距離測試

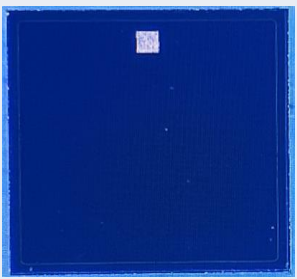
品名	T5	T8	白熾燈
新晶片2	8.32	6.44	3.58
新晶片1	6.0	6.4	6.4
現有晶片	7.42	6.89	3.40

Unit : m

➤無干擾與光干擾下，新晶片與現有晶片差異不大，且滿足規格書規格，可申請替換

晶片外觀照片

原晶片與新晶片

外觀照片	原晶片	新晶片1	新晶片2
正面			

RELIABILITY TESTING REPORT

Customer(申請人)	李建勳
Depart.(部門)	IBU RD_通訊元件開發部_通訊元件課
Test No.(編號)	准-24-08-IRM2-2161-TP
Test Date(試驗日期)	2024/09/27~2024/11/12
Package Type(產品類別)	IRM-3638JT

Tester:

Checker:

Signed By:

Reliability Testing Condition
PRIOR TEST:

NO	Code	Test Item	Condition	Device	Device	Physical	ICC	VOH	VOL	Failure
				Times	Pcs	NG(Pcs)	Δ	Δ	Δ	Number
1	LIFE	常溫壽命 Room Temperature Life	25°C / 1000 H / @Vcc=6V	168HRS	22		0.226	5.019	0.034	0
				1000HRS			0.226	5.020	0.034	
2	SH	焊錫耐熱 Resistance to Solder Heat	Dip / 260°C / 10 sec / 3 Times	3TIMES	22		0.226	5.020	0.034	0
3	HTHB	高溫高濕 High Temperature / Humidity Life	85°C/85%RH / 1000 H / @Vcc=6V	168HRS	22		0.230	5.019	0.034	0
				1000HRS			0.228	5.020	0.034	
4	HTB	高溫 High Temperature Life	100°C / 1000 H / @Vcc=6V	168HRS	22		0.225	5.019	0.034	0
				1000HRS			0.223	5.020	0.257	
5	TC	溫度循環 Temperature Cycle	-40°C~100°C / Dwell time 15min / 300 Cycles	300CYCLES	22		0.232	5.019	0.034	0
6	LTB	低溫 Low Temperature Life	-40°C / 1000 H / @Vcc=6V	168HRS	22		0.225	5.019	0.034	0
				1000HRS			0.226	5.020	0.034	

(Test Item)	(Acceptance Criteria)	Condition
Icc(mA)	0.10~0.45 mA	Vcc=5V
Voh(V)	> 4.8V	Vcc=5V
Vol(V)	< 0.4V	Vcc=5V