

Spec. No.: HL3535-6P143W

Issued Date: 2024-01-03

# SPECIFICATION

Model Name: Multi Emitters 660/730/770/810/850/905

Model NO. : HL3535-6P143W

Customer No.:

Prepared by: CaiYemin

Approved by: XieZongwu

Customer approved by: \_\_\_\_\_



Add: 7F, Bldg B, JinKe Industrial Park WuHe Road, LongHua District,  
Shenzhen, Guangdong Prov., China PostCode: 518110

Tel: 86-0755-28147404

Fax: 86-0755-28149249

E-mail: [xwjma@163.com](mailto:xwjma@163.com)

<http://www.szwhaley.com/>

## Multi Emitters

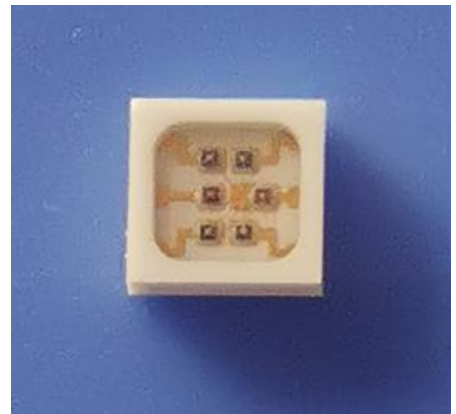
### HL3535-6P143W

#### ■Features

- molded packages
- 6pin designs
- Multi wavelengths LEDs
- Matching detector response

#### ■Applications

- SPO2
- Blood analysis
- Medical instrumentation
- Radiometric instruments



Name	Model	RED	IR	IR	IR	IR	IR	Package
Multi Emitters	HL3535-6P143W	660	730	770	810	850	905	6Pin, COB

#### ■Absolute Maximum Ratings

(Ta= 25℃)

Parameter	Symbol	Max.	Unit	Note
Power Dissipation	P <sub>d</sub>	60	mW	---
Forward Current	I <sub>F</sub>	20	mA	---
Peak Forward Current	I <sub>FP</sub>	100	mA	1/10 Duty cycle,0.1ms pulse width
Reverse Voltage	V <sub>R</sub>	5	V	---
Operating Temperature	T <sub>opr</sub>	-25~+85	℃	---
Storage Temperature	T <sub>Stg</sub>	-40~+100	℃	---

# Multi Emitters

## HL3535-6P143W

### ■Electrical/Optical Characteristics

(Ta= 25℃)

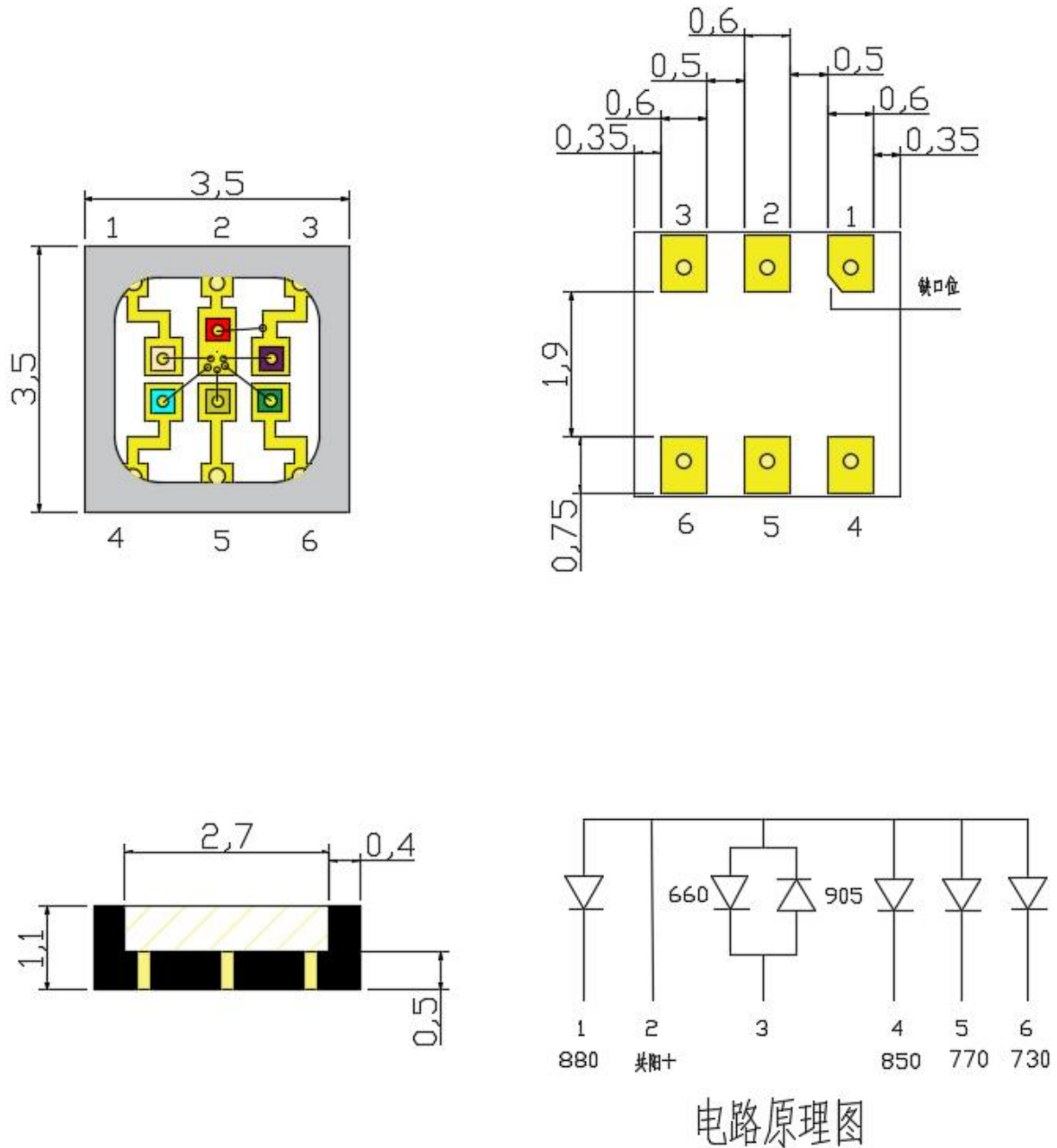
Parameter	Symbol	Min.			Typ.			Max.			Units	Test Conditions
		660	730	770	660	730	770	660	730	770		
Forward Voltage	VF	--	--	--	1.9	1.7	1.6	--	--	--	V	IF=20mA
Reverse Current	IR	--	--	--	--	--	--	10	10	10	uA	VR=5V
Radiant Power	Po	--	--	--	9.5	4.5	4.5	--	--	--	mW	IF=20mA
Peak Wavelength	$\lambda_p$	--	--	--	663	730	765	--	--	--	nm	IF=20mA
Spectral Line Half-width	$\Delta\lambda$	--	--	--	18	28	34	--	--	--	nm	IF=20mA

Parameter	Symbol	Min.			Typ.			Max.			Units	Test Conditions
		810	850	905	810	850	905	810	850	905		
Forward Voltage	VF	--	--	--	1.5	1.4	1.35	--	--	--	V	IF=20mA
Reverse Current	IR	--	--	--	--	--	--	10	10	10	uA	VR=5V
Radiant Power	Po	--	--	--	4.8	4.2	2.0	--	--	--	mW	IF=20mA
Peak Wavelength	$\lambda_p$	--	--	--	810	850	905	--	--	--	nm	IF=20mA
Spectral Line Half-width	$\Delta\lambda$	--	--	--	40	35	48	--	--	--	nm	IF=20mA

## Multi Emitters

HL3535-6P143W

### ■Dimension:



### Notes:

1. All dimensions are in millimeters
2. Tolerances unless dimensions  $\pm 0.1\text{mm}$

### ■ Storage and Soldering Condition

Please read the following notes before using the product: 使用本产品前请阅读以下说明:

#### 1. Over-current-proof 过电流保护

Customer must apply resistors for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).

## Multi Emitters

### HL3535-6P143W

客户必须用电阻器保护；否则微小的电压变化会引起较大的电流变化（将会发生烧坏）。

#### 2. Storage 储存

2.1 Do not open moisture proofs bag before the products are ready to use.

2.2 在产品准备使用前不要打开防潮袋

2.3 Before opening the package, the LEDs should be kept at 30℃ or less and 85% RH or less.

打开包装前，LED 应保持在 30℃ 以下或小于 85%湿度

2.4 The LEDs should be used within a year. 未拆包的 LED 应在一年内使用.

2.5 After opening the package, the LEDs should be kept at 30℃ or less and 65% RH or less. 打开包装后，LED 应保持在温度 30℃ 以下或湿度小于等于 65%。

2.6 The LEDs should be used within 4 weeks after opening the package. 打开包装后,LED 应在 4 周内使用 If the moisture adsorbent material (silica gel) has fabled away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions. 如果干燥剂挥发完或 LED 已经超过存储时间，应采用下列条件进行烘烤处理。

Baking treatment: 150±5℃ for 4 hours. 烘烤处理 150±5℃/4 小时,24 小时内使用

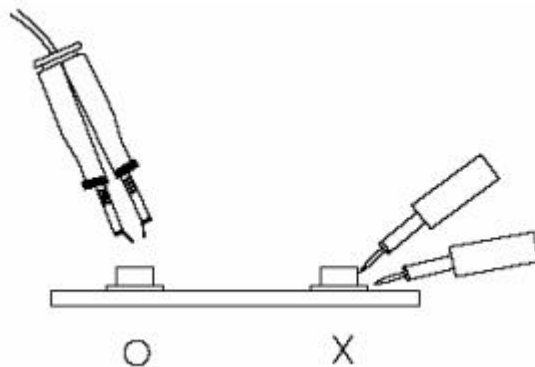
#### 3. Soldering Condition 焊接条件

3.1 过回流焊就用低温锡膏，200 度内使用；

3.2 如果用高温平台就用中温锡膏，230-240 度内使用，控制 5 秒内完成最佳。

#### 4. Repairing 返工

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing. LED 已焊接完成后不应返工。当必须要返工时，应使用双头烙铁（如下图）。应事先确认 LED 的特性是否会因修复而损坏或不会被损坏。



#### 修订记录

项次	日期	内 容	版本号
1	2024-01-03	新发行	Ver.01