

# **6374/R5DA-ALMB/X/MS**

#### **Features**

- High luminous intensity output
- Oval Shape
- Well defined spatial radiation
- Wide viewing angle  $(2 \theta_{1/2})$ :  $70^{\circ} / 40^{\circ}$
- UV resistant epoxy
- The product itself will remain within RoHS compliant version.

### **Descriptions**

- This precision optical performance oval LED is specifically designed for passenger information signs
- This lamp has matched radiation patterns with red mixing dual color applications

#### **Applications**

- Color graphic signs
- Message boards
- Variable message signs (VMS)
- Commercial outdoor advertising

#### **Device Selection Guide**

LED Part No.	Chip Material	<b>Emitted Color</b>	Lens Color	Stopper
6374/R5DA-ALMB/MS	AIC I D	Brilliant Red	Red Diffused	No
6374/R5DA-ALMB/P/MS	AlGaInP			Yes

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Device Number: DLE-637-030 Prepared date:04-24-2007 Prepared by: Flourix Chen

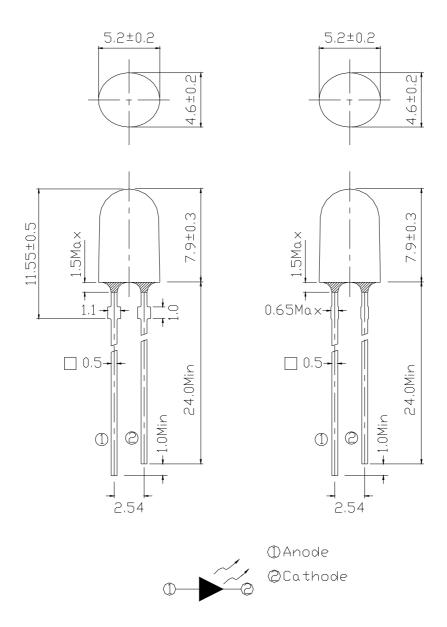


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# **Package Dimensions**

**Stopper Type** 

#### No Stopper Type



#### **Notes:**

- Other dimensions are in millimeters, tolerance is 0.25mm except being specified.
- Protruded resin under flange is 1.5mm Max LED.
- Bare copper alloy is exposed at tie-bar portion after cutting.



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## **Absolute Maximum Rating (T<sub>a</sub>=25℃)**

Parameter	Symbol	Absolute Maximum Rating	Unit
Forward Current	$I_{\mathrm{F}}$	50	mA
Pulse Forward Current (Duty1/10@ 1KHz)	$I_{\mathrm{FP}}$	100	mA
Operating Temperature	Topr	-40 ~ +85	$^{\circ}\! \mathbb{C}$
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	$^{\circ}\!\mathbb{C}$
Soldering Temperature(Notes *1)	T <sub>sol</sub> *	260 ±5	$^{\circ}\! \mathbb{C}$
Power Dissipation	$P_d$	120	mW
Electrostatic Discharge	ESD	2K	V
Reverse Voltage	VR	5	V

Notes: \* Soldering time ≤ 5 seconds.

## Electro-Optical Characteristics (T<sub>a</sub>=25°C)

_			*			
Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition
Luminous Intensity	$I_{V}$	1425	1800	2250	mcd	
Viewing Angle	$2 heta_{1/2}$		X:70Y:40		deg	
Peak Wavelength	λp		632			T 20 A
Dominant Wavelength	λd	620	624	628	nm	$I_F=20\text{mA}$
Spectrum Half width	Δλ		20			
Forward Voltage	$V_{\mathrm{F}}$	1.8	2.0	2.6	V	
Reverse Current	$I_R$			10	$\mu$ A	V <sub>R</sub> =5V

## Rank Combination (I<sub>F</sub>=20mA)

Rank	L	M	
Luminous Intensity	1425~1800	1800~2250	

<sup>\*</sup>Measurement Uncertainty of Luminous Intensity: ±15%

Unit:mcd

Rank	1	2	3	4
Forward Voltage	1.8~2.0	2.0~2.2	2.2~2.4	2.4~2.6

<sup>\*</sup>Measurement Uncertainty of Forward Voltage: ±0.1V

Unit:V

Rank	1	2
Dominant Wavelength	620~624	624~628

<sup>\*</sup>Measurement Uncertainty of Dominant Wavelength ±1.0nm

Unit:nm

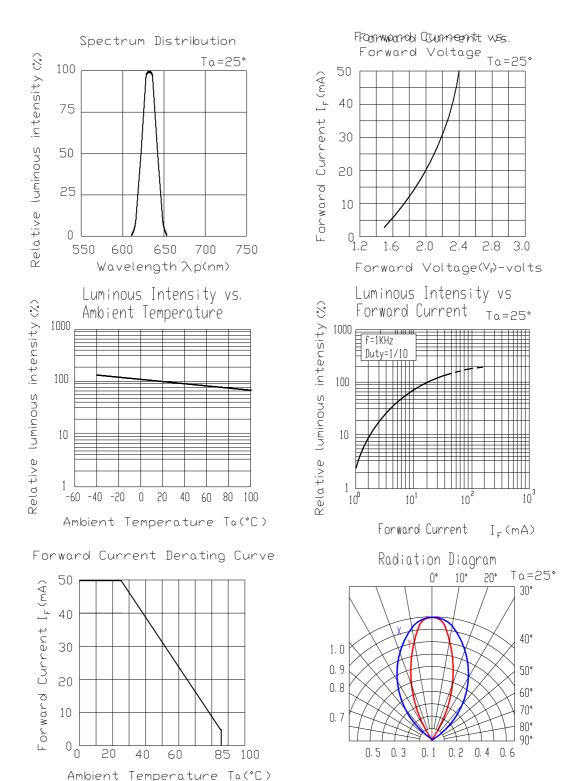
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## **Typical Electro-Optical Characteristics Curves**



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## **Packing Quantity Specification**

- 1.500PCS/1Bag, 5Bags/1Box
- 2.10Boxes/1Carton

#### **Label Form Specification**

CPN: Customer's Production Number

P/N : Production Number QTY: Packing Quantity

CAT: Ranks of Luminous Intensity and Forward Voltage

HUE: Rank of Dominant Wavelength

**REF:** Reference

LOT No: Lot Number

MADE IN TAIWAN: Production Place

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#### **Notes**

- 1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
- 2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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#### 4. Soldering Condition

Careful attention should be paid during soldering. When soldering, leave more then 3mm from solder joint to case, and soldering beyond the base of the tie bar is recommended.

Avoiding applying any stress to the lead frame while the LEDs are at high temperature particularly when soldering.

Recommended soldering conditions:

Hand Soldering		DIP Soldering		
Temp. at tip of iron	400°C Max. (30W Max.)	Preheat temp.	100°C Max. (60 sec Max.)	
Soldering time	3 sec Max.	Bath temp.	265 Max.	
Distance	3mm Min.(From solder joint to case)	Bath time.	5 sec Max.	
		Distance	3mm Min.	

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