



EVERLIGHT ELECTRONICS CO.,LTD.

# DATA SHEET

PART NO. : 339-1UYUBW/S530-A4

DATE : 2004/3/4

DEPARTMENT : CHR&D1

REVISION : 1

<b>RECEIVED</b>			
<input checked="" type="checkbox"/> MASS PRODUCTION			
<input type="checkbox"/> PRELIMINARY			
<input type="checkbox"/> CUSTOMER DESIGN			
DEVICE NUMBER : CDLE-033-1221			
PAGE : 7			
CUSTOMER	DESIGNER	CHECKER	APPROVER

REV.	DESCRIPTION	RELEASE DATE

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**Technical Data Sheet**  
**5.0mm Multi-Color Round Type LED Lamps**

**339-1UYUBW/S530-A4**

■ **Features :**

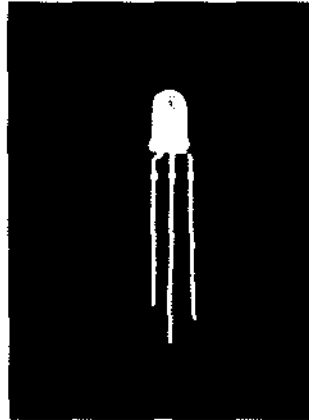
- Two chips are matched for uniform light output, wide viewing angle
- Long life-solid state reliability
- I.C. compatible/Low power consumption

■ **Descriptions :**

- The 339-1 LED lamps contain two integral chips and is available as both bicolor and bipolar types.
- The Super Yellow and Blue light is emitted by diodes of AlGaInp and InGaN/SiC respectively.
- Type of bipolar lamps are both White Diffused and Color Diffused while the bicolor are White Diffused

■ **Applications :**

- TV set
- Monitor
- Telephone
- Computer



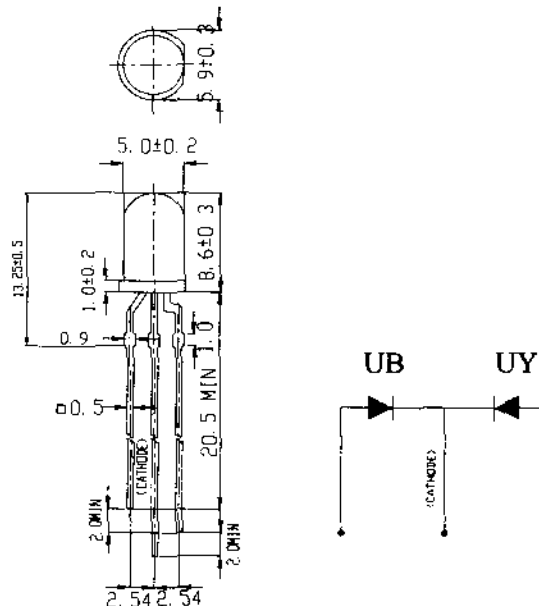
PART NO.	Chip		Lens Color
	Material	Emitted Color	
339-1UYUBW/S530-A4	AlGaInP	Super Yellow	White Diffused
	InGaN/SiC	Blue	



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Package Dimensions



Notes: 1. All dimensions are in millimetres

- 2. An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.
- 3. Tolerances unless Dimension  $\pm 0.25$ mm.

Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating		Unit
Forward Current	$I_F$	UY/S530	25	mA
		UB/C470	30	
Operating Temperature	$T_{opr}$	-40 to +85		$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 to +100		$^\circ\text{C}$
Soldering Temperature	$T_{sol}$	260 $\pm$ 5		$^\circ\text{C}$
Electrostatic Discharge	ESD	UY	2000	V
		UB	1000	
Power Dissipation	$P_d$	UY/S530	60	mW
		UB/C470	130	
Peak Forward Current	$I_F(\text{Peak})$	UY/S530	160	mA
		UB/C470	100	
Reverse Voltage	$V_R$	5		V

Note: \*1:  $I_{FP}$  Conditions -- Pulse Width  $\leq 1\text{msec}$  and Duty  $\leq 1/10$ .  
\*2: Soldering time  $\leq 5$  seconds.



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**Electro-Optical Characteristics (Ta=25°C)**

Parameter	Symbol		Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I <sub>v</sub>	UY/S530	25	50	/	mcd	I <sub>F</sub> = 20 mA
		UB/C470	16	32	/		
Viewing Angle	2θ 1/2		/	100	/	deg	I <sub>F</sub> = 20 mA
Peak Wavelength	λ <sub>p</sub>	UY/S530	/	591	/	nm	I <sub>F</sub> = 20 mA
		UB/C470	/	468	/		
Dominant Wavelength	λ <sub>d</sub>	UY/S530	/	589	/	nm	I <sub>F</sub> = 20 mA
		UB/C470	/	470	/		
Spectrum Radiation Bandwidth	Δλ	UY/S530	/	15	/	nm	I <sub>F</sub> = 20 mA
		UB/C470	/	26	/		
Forward Voltage	V <sub>F</sub>	UY/S530	/	2.0	2.4	V	I <sub>F</sub> = 20 mA
		UB/C470	/	3.5	4.3		
Reverse Current	I <sub>R</sub>	UY/S530	/	/	10	μA	V <sub>R</sub> = 5 V
		UB/C470	/	/	50		



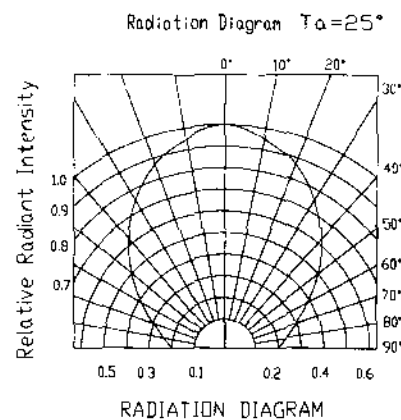
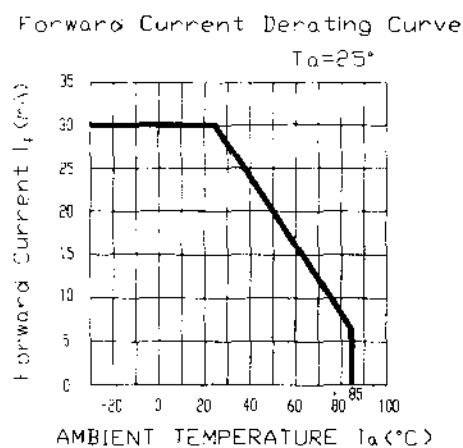
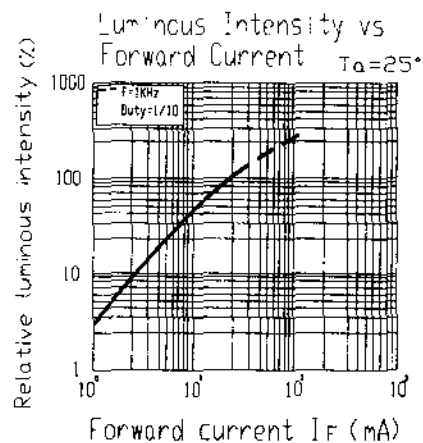
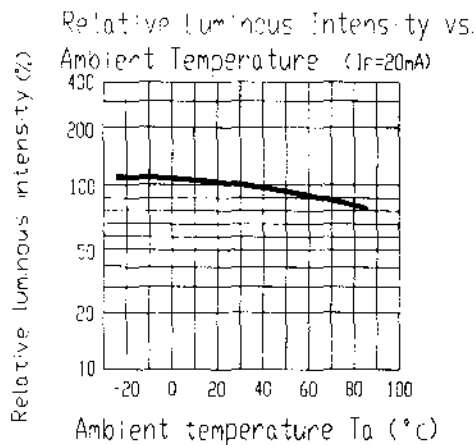
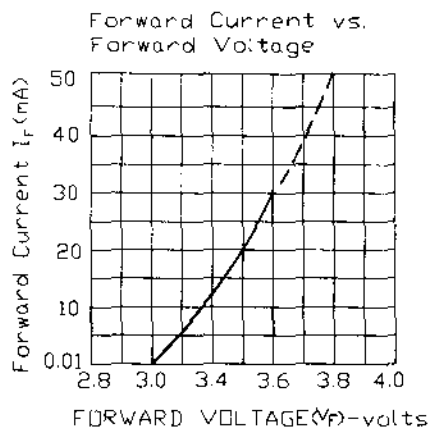
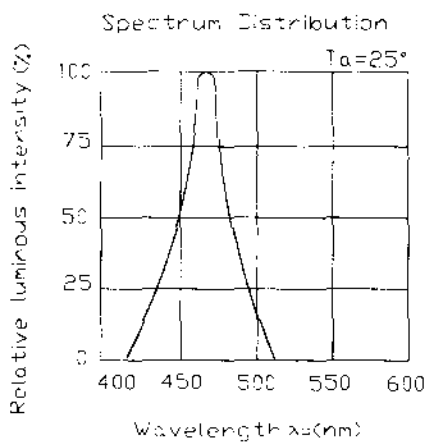
# Technical Data Sheet

## 5.0mm Multi-Color Round Type LED Lamps

### 339-1UYUBW/S530-A4

#### Typical Electro-Optical Characteristic Curves:

(UB)





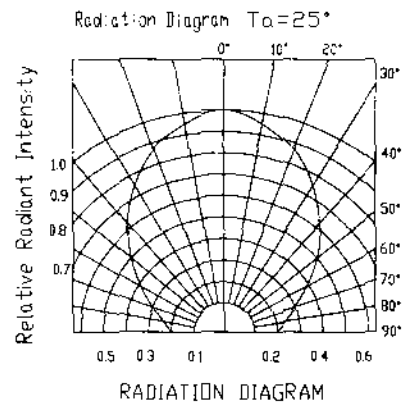
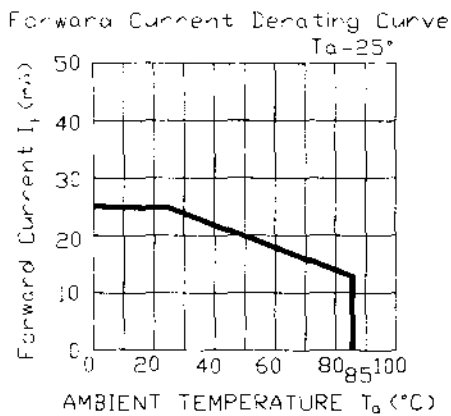
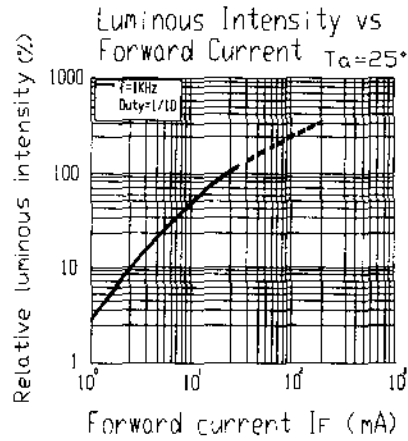
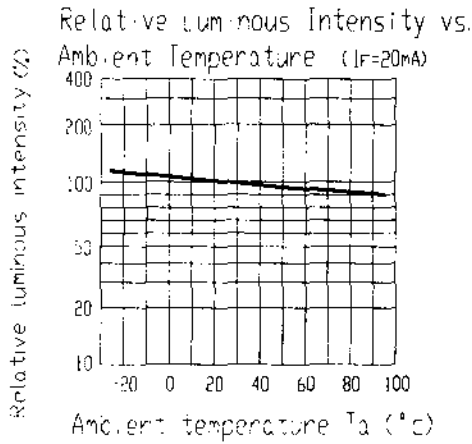
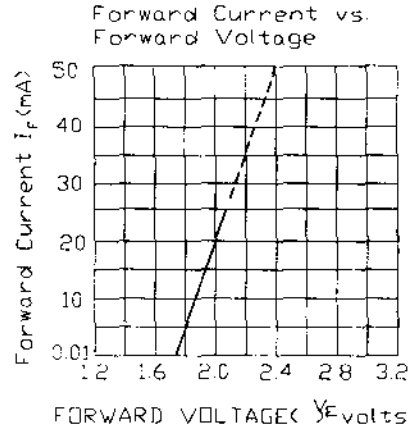
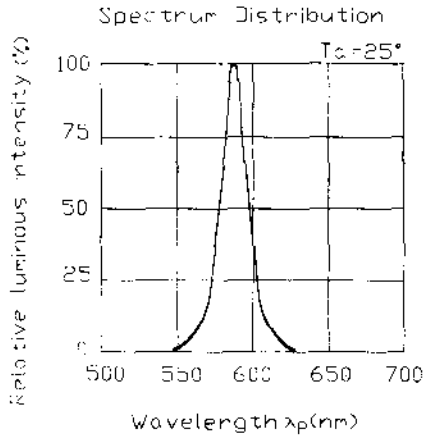
# Technical Data Sheet

## 5.0mm Multi-Color Round Type LED Lamps

**339-1UYUBW/S530-A4**

■ Typical Electro-Optical Characteristic Curves:

(UY)





Technical Data Sheet  
5.0mm Multi-Color Round Type LED Lamps

**339-1UYUBW/S530-A4**

■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	10 SEC	76 PCS	0/1
2	Temperature Cycle	H : +100°C 15min § 5 min L : -40°C 15min	300 CYCLES	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min § 10 sec L : -10°C 5min	300 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -40°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP : 25°C IF = 20mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C / 85% RH	1000 HRS	76 PCS	0/1

**EVERLIGHT**

## Technical Data Sheet

### 5.0mm Multi-Color Round Type LED Lamps

**339-1UYUBW/S530-A4**

#### Packing Quantity Specification

1.500PCS/1Bag · 4Bags/1Box

2.10Boxes/1Carton

#### Label Form Specification

**EVERLIGHT**

CPN:

P/N:



339-1UYUBW/S530-A4

QTY:



LOT NO: EI



CAT:

HUE:

REF:

CPN: Customer's Production Number

P/N : Production Number

QTY: Packing Quantity

CAT: Ranks

HUE: Peak Wavelength

REF: Reference

LOT No: Lot Number

MADE IN TAIWAN: Production Place

MADE IN TAIWAN

#### 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.
3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.

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Rev.: 1

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Device Number : CDLE-033-1221

Prepared date: 2004/3/4

Prepared by:ZHANG