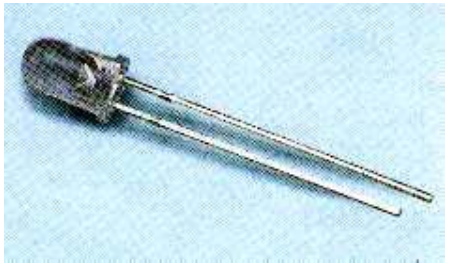
EVERLIGHT ELECTRONICS CO.,LTD.

Technical Data Sheet

333/Y5C1-APQB/X/MS

Features



- Popular T-1 3/4 diameter package.
- Choice of various viewing angles.
- Available on tape and reel.
- Reliable and robust.
- The product itself will remain within RoHS compliant version
- UV resistant epoxy

Descriptions

- The series is specially designed for applications requiring higher brightness.
- The LED lamps are available with different colors, intensities, epoxy colors, etc.
- Superior performance in outdoor environment

Applications

- Single or Dual Color Graphic Signs
- Message boards
- Variable message signs (VMS)
- Commercial outdoor advertising

Device Selection Guide

LED Part No.	Chip		Lens Color	Stopper
	Material	Emitted Color		
333/Y5C1-APQB/MS	AlGaInP	Brilliant Yellow	Water clear	No
333/Y5C1-APQB/P/MS				Yes

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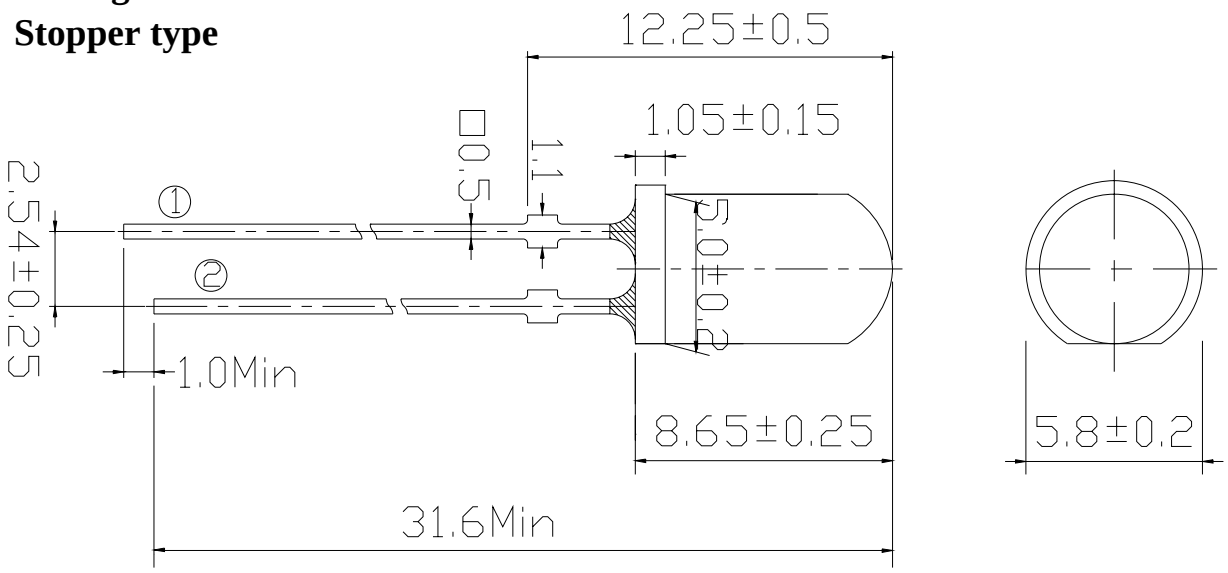
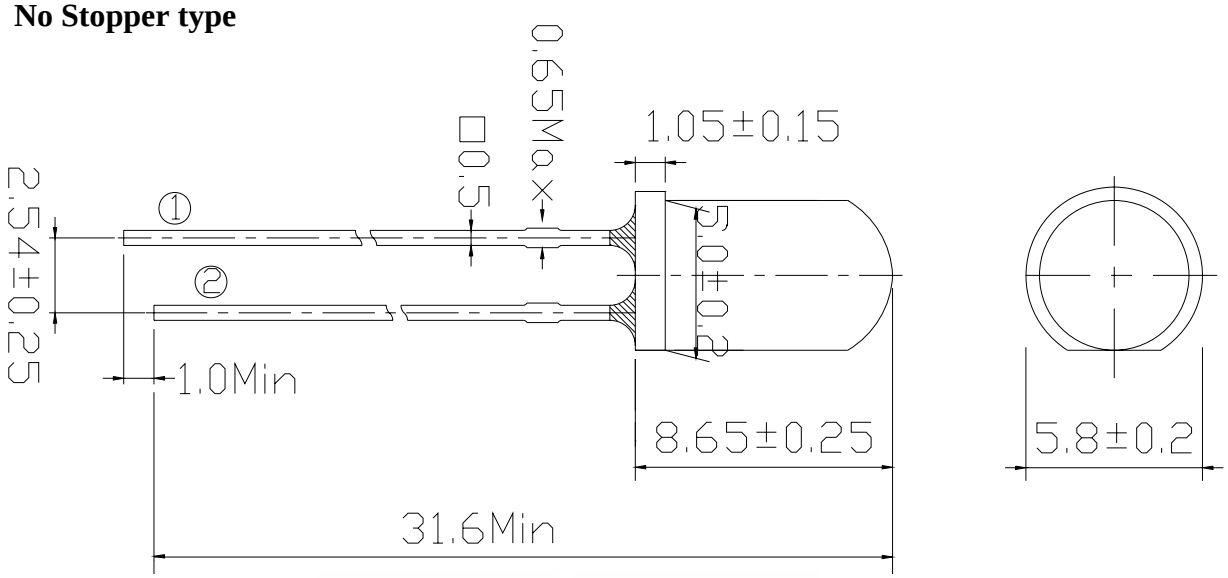
Package Dimensions

Stopper type



No Stopper type



Notes:

- All dimensions are in millimeters, tolerance is 0.25mm except being specified.
- Lead spacing is measured where the lead emerges from the package.
- Protruded resin under flange is 1.5mm Max LED.

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Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Units
Forward Current	I_F	50	mA
Pulse Forward Current*1	I_{FP}	100	mA
Operating Temperature	T_{opr}	-40 ~ +85	℃
Storage Temperature	T_{stg}	-40 ~ +100	℃
Soldering Temperature*2	T_{sol}	260 ±5	℃
Power Dissipation	P_d	120	mW
Reverse Voltage	V_R	5	V
Electrostatic Discharge	ESD	2K	V

Notes: *1:I_{FP} Conditions--Pulse Width≦10msec and Duty≦1/10.

*2:Soldering time≦5 seconds.

Electro-Optical Characteristics (Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Forward Voltage	V_F	I_F=20mA	1.8	--	2.6	V
Luminous Intensity	I_V		2850	3600	4500	mcd
Viewing Angle	2θ 1/2		--	15	--	deg
Peak Wavelength	λ p		--	591	--	nm
Dominant Wavelength	λ d		586	--	594	nm
Spectrum Radiation Bandwidth	$\Delta\lambda$		--	15	--	nm
Reverse Current	I_R	V_R=5V	--	--	10	μA

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Rank Combination (I_F=20mA)

Rank	P	Q
Luminous Intensity	2850~3600	3600~4500

*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

*Measurement Uncertainty of Forward Voltage: ±0.1V Unit:V

Rank	1	2
Dominant Wavelength	586~590	590~594

*Measurement Uncertainty of Dominant Wavelength ±1.0nm Unit:nm

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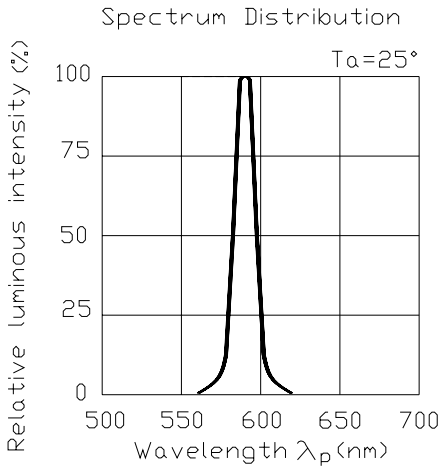
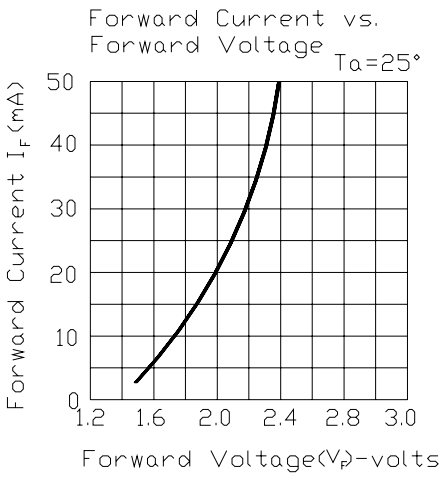
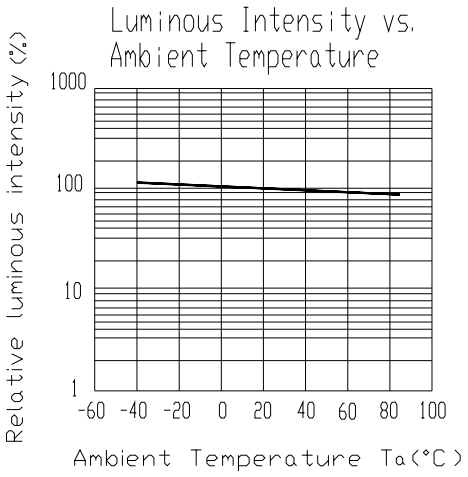
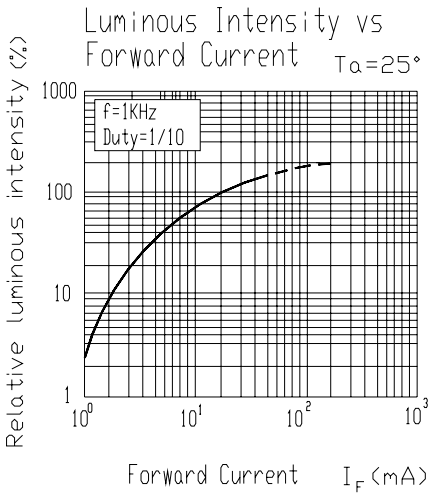
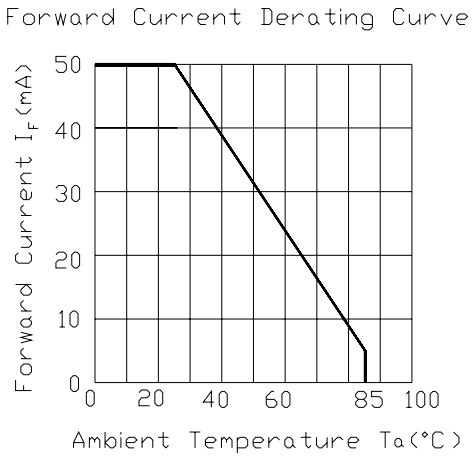
Typical Electro-Optical Characteristics Curves

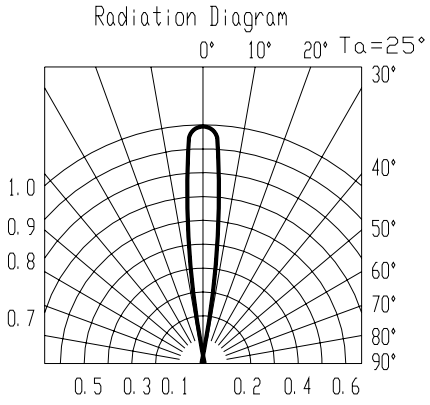












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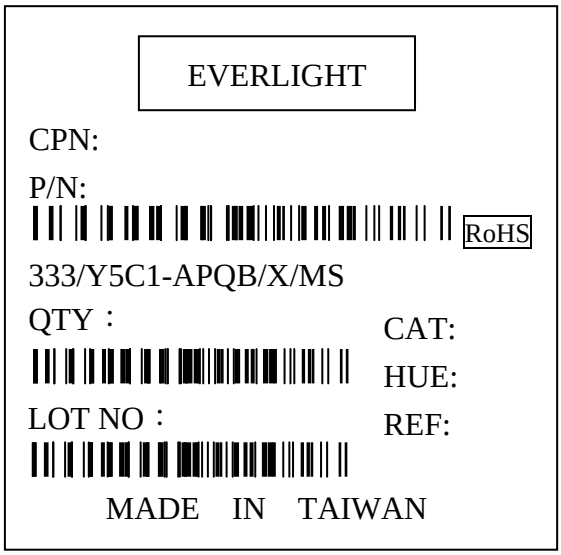
Packing Quantity Specification

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: Ranks 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.
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.
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℃ Max. (30W Max.)	Preheat temp.	100℃ 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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