



HUIYUAN ELECTRONIC CO.,LTD.

## TECHNOLOGY DATA SHEET & SPECIFICATIONS

MODEL: 7206B2D-ESA-B

### Features

- Electricity control IC embedded
- Fancy, fun, hottest in the market.
- Lens size with 5mm / 8mm / 10mm options
- Viewing Angles 30°..
- Operating voltage range : 3V-5V DC.
- Blinking frequency : 1.8Hz
- Frequency tolerance :  $\pm 20\%$
- RoHS compliant

### Descriptions

- New trend creations
- Low energy consumptions
- Low maintenance costs
- High application design flexibility
- High reliability

### Applications

- Toys / sports utilities
- Miniature key chains
- Effect Lights.
- Display / decoration lights .
- Electronic displays and signals
- Interior decoration lights.
- Indicator lights.
- Solar energy lights / garden lights

### Device Selection Guide

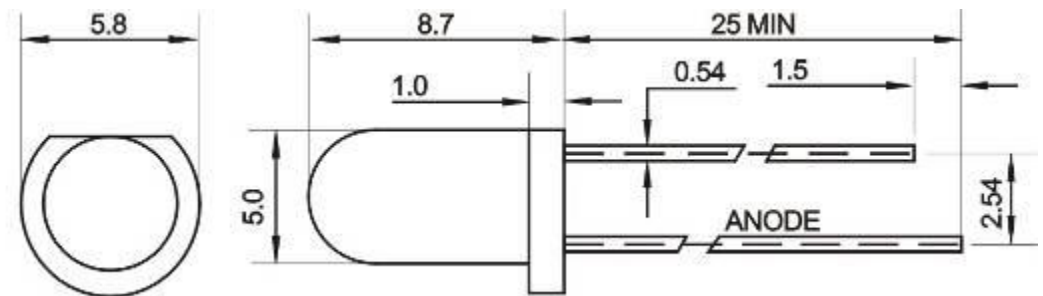
LED Part No.	Chip		Lens Color
	Material	Emitted Color	
7206B2D-ESA-B	InGaN	Blue	Diffused



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### Package Dimensions



UNIT:mm

### 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.

### Absolute Maximum Rating ( $T_a=25^{\circ}\text{C}$ )

Parameter	Symbol	Absolute Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	$I_{FPM}$	100	mA
Forward Current	$I_{FM}$	30	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	100	mW
Operating Temperature	$T_{opr}$	-40~+80	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$	-40~+100	$^{\circ}\text{C}$
Soldering Heat (5s)	$T_{sol}$	260	$^{\circ}\text{C}$



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### Electro-Optical Characteristics ( $T_a=25^{\circ}\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_v$	600	---	800	mcd	IF=20mA(Note1)
Viewing Angle	$2\theta_{1/2}$	---	30	---	Deg	(Note 2)
Peak Emission Wavelength	$\lambda_p$	460	465	470	nm	IF=20mA
Spectral Line Half-Width	$\Delta\lambda$	15	20	25	nm	IF=20mA
Turn on time	Duty		1/20		ms	IF=20mA
Blinking Frequency	Fled		1.8		Hz	IF=20mA
Forward Voltage	$V_F$	3.0	---	5.0	V	IF=20mA
Reverse Current	$I_R$	---	---	10	$\mu\text{A}$	VR=5V

#### Note:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.



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**Typical Electro-Optical Characteristics Curves**

