

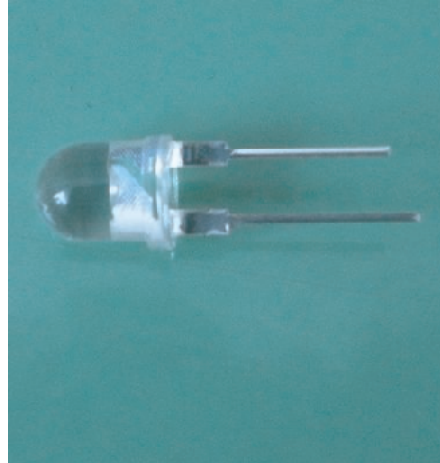
Model no: SX834BL-450

1W 8mm 450nm blue power led

Specification for Approval

● Feature

- Chip material : Ga AlAs
- Emitted color : deep blue
- Lens Appearance: water clear
- High flux output and high luminance
- Lead free product
- Meet ROHS



● Applications

- Plant grow light
- Disinfection and sterilizer
- Light

■ Notes

1. All dimensions are in millimeter.
2. Protruded resin under flange 1.5mm Max
3. Lead spacing is measured where the lead emerge from the package.
4. Above specification may be changed without notice . Our company will reserve authority on material change for above specification.
5. These specification sheets include materials protected under copyright of SEALAND corporation.

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Absolute Maximum Rating (Ta=25°C)

Item	Symbol	Value	Unit
DC forward current	I _F	350	mA
Pulse forward current*	I _{FP}	3	A
Power dissipation	P _D	1	W
Operating temperature	T _{opr}	-20~+75	°C
Storage temperature	T _{stg}	-30~+80	°C
Reverse voltage	V _R	5	V
Sold soldering temperature	T _{sol}	260°C/3Sec (*1)	---

Plus with Max 10ms,duty ratio max 1/10

Initial Electrical/Optical Characteristics (Ta=25°C)

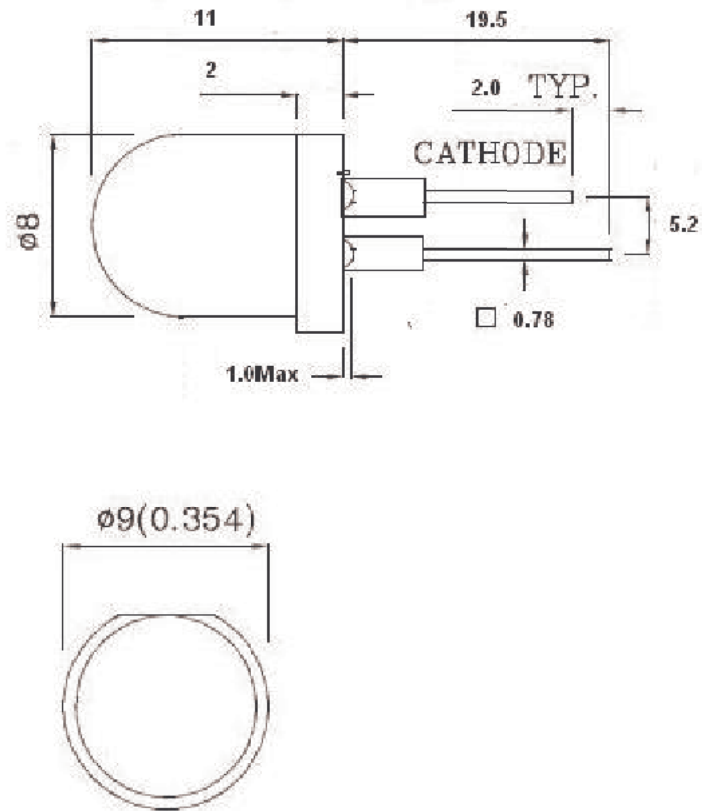
Item	Symbol	condition	Min	Type	Max	Unit
DC forward Voltage	V _F	I=350mA	3.3	3.5	3.7	V
DC reverse Current	I _R	V=5V	----	----	10	μ A
Peak wavelength	λ	I=350mA		450	455	nm
Spectrum Radiation Bandwidth	Δ λ	I=350mA	----	20	----	Nm
Luminous Intensity	I _V	I=350mA	25000	----	28000	MCD
			15		20	LM
50%Power Angle	2 θ 1/2	I=350mA	----	30	----	deg

NOTES:

1. Absolute maximum ratings Ta=25°C
2. Tolerance of measurement of forward voltage ±0.1V
3. Tolerance of measurement of peak Wavelength ±2.0nm
4. Tolerance of measurement of luminous intensity ±15

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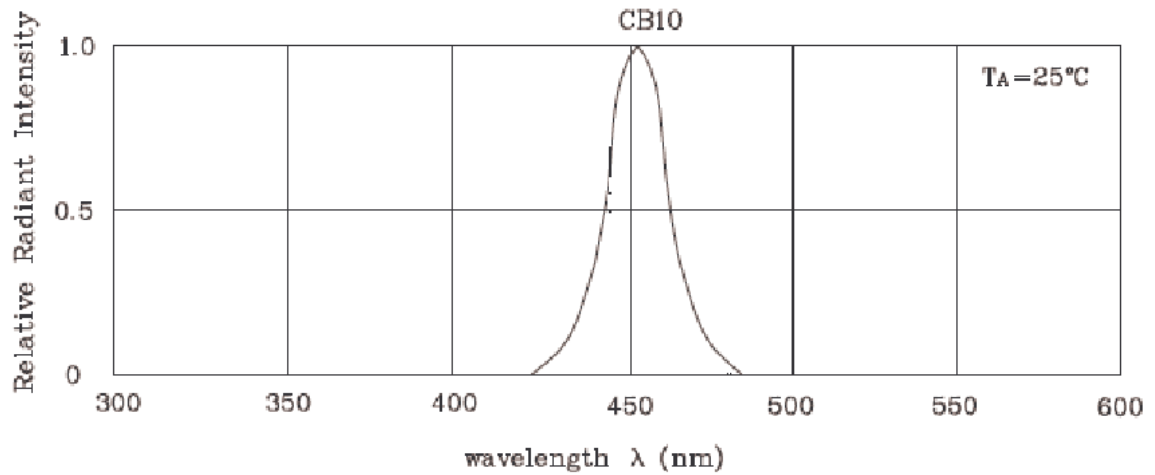
Notes.

1. Dimensions are in millimeters.
2. Tolerances for fixed dimensions are ± 0.25 mm

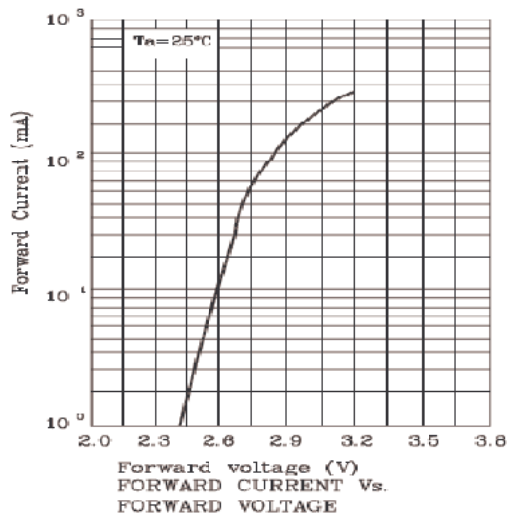
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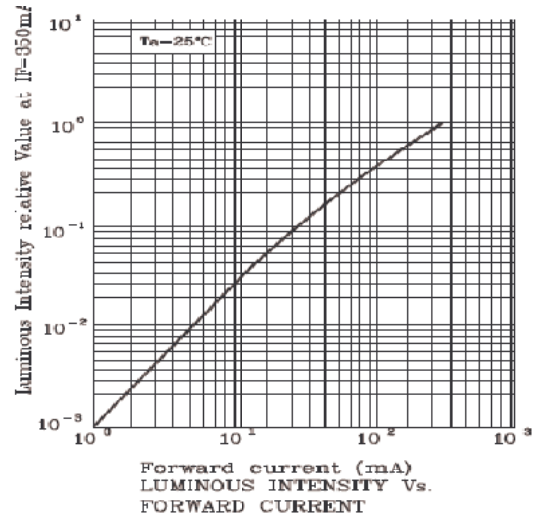
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RELATIVE INTENSITY Vs. WAVELENGTH



FORWARD CURRENT Vs. FORWARD VOLTAGE

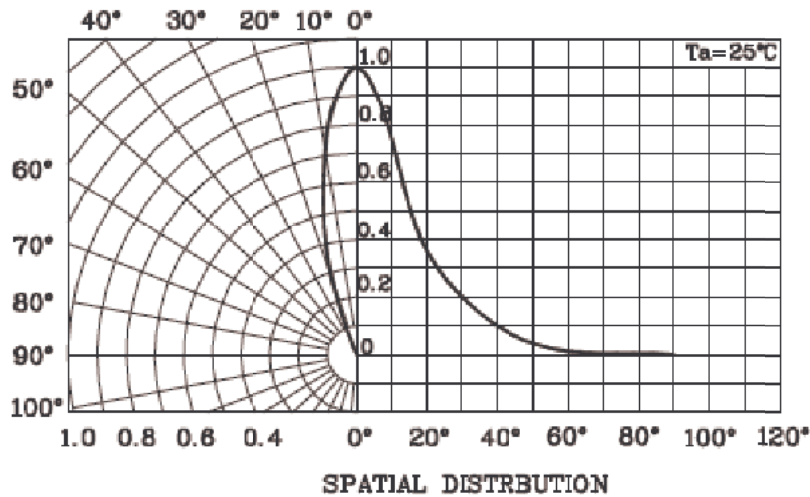
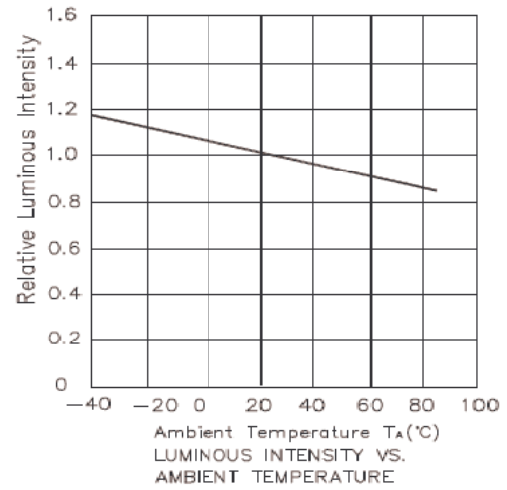
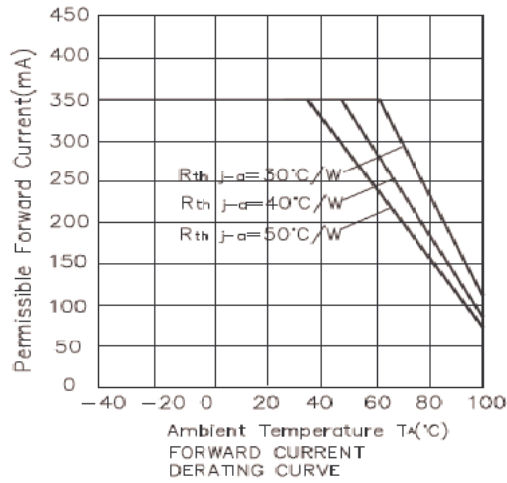


LUMINOUS INTENSITY Vs. FORWARD CURRENT

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Reliability performance

Test items and result

Test classification	Test item	Test condionts	Test duration	Sample size	AC/RE
Life test	Room temperature DC operating life test	Ta=25±5°C IF=350mA	1000hrs	60pcs	0/1
Environment test	Thermal shock Test	-10±5°C ↔ +100±5°C 5min 10sec 5min	50cysles	60pcs	0/1
	Temperature cycle test	-40±5°C ↔ +85±5°C 30min 5sec 30min	50cysles	60pcs	0/1
	High temperature & High humidity test	Ta=85±5°C RH=85%±0.5%RH	1000hrs	60pcs	0/1
	High temperature storage	Ta =100±5°C	1000hrs	60pcs	0/1
	Low temperature storage	Ta =-55±5°C	1000hrs	60pcs	0/1
Mechanical test	Resistance to soldering heat	Ta =230±5°C	5sec	60pcs	0/1
	Lead integrity	Load 2.5N(0.25KGf) 0°C ∞ 90°C ∞ 0°C	3times	60pcs	0/1