

Model no: SX534BL-450

5mm 450nm blue led

Specification for Approval

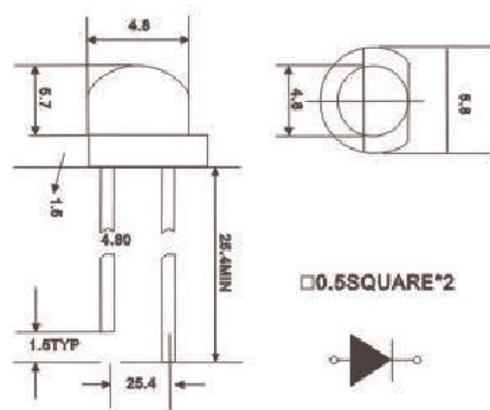
● Feature

- water clear type
- 5mm straw LED
- superior weather-resistance
- high radiant intensity

● Applications

- Up to electronic switch
- Digital read out lamps
- Audio equipment
- Backlight
- Growing plant

Appearance



■ 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. lens color : Water clear.
5. Above specification may be changed without notice . Our company will reserve authority on material change for above specification.
6. These specification sheets include materials protected under copyright of Sealand corporation.

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PART NO	CHIP	LENS COLOR
	MATERIAL	
Blue	GaN	Water clear

Absolute Maximum Rating (Ta=25°C)

Item	Symbol	Value	Unit
DC forward current	I _F	20	mA
Pulse forward current 1*	I _{FP}	100	mA
Power dissipation	P _D	100	mW
Operating temperature	T _{opr}	-40~+85	°C
Storage temperature	Y _{stg}	-40~+80	°C
Reverse voltage	V _R	5	V
Sold soldering temperature	T _{sol}	260°C/3Sec	---

1* Plus with Max 10ms,duty ratio max1/10

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

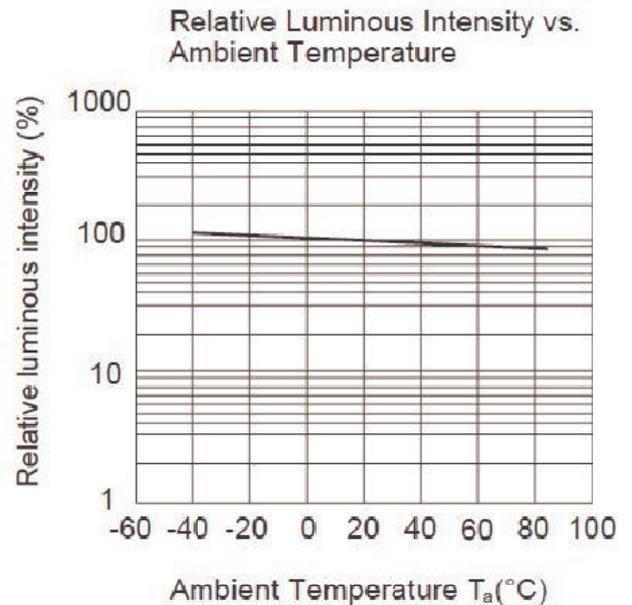
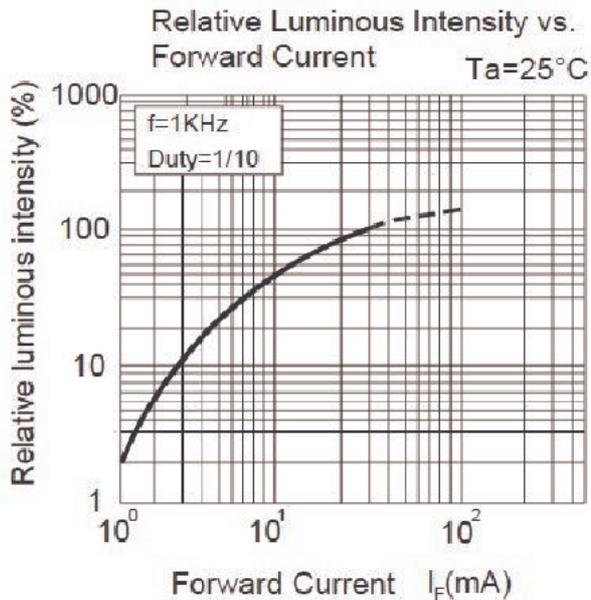
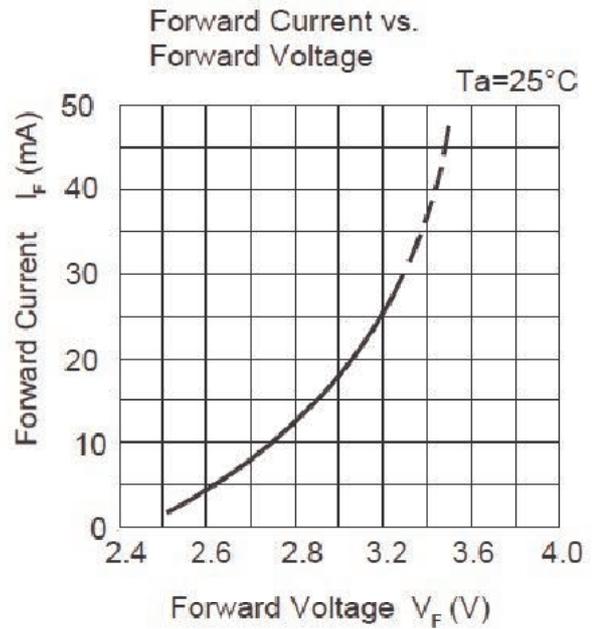
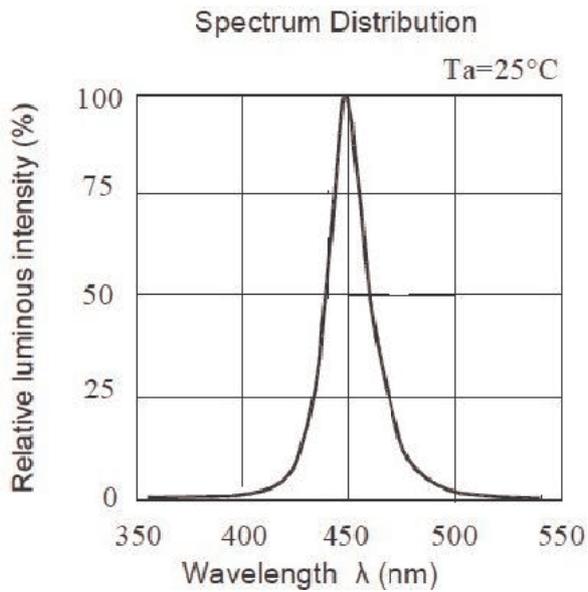
Item	Symbol	condition	Min	Type	Max	Unit
DC forward Voltage	V _F	I=20mA	3.0	3.3	3.6	V
DC reverse Current	I _R	V=5V	----	----	5	μ A
Dome Wavelength	W _D	I=20mA	447.5	450	452.5	Nm
Spectrum Radiation Bandwidth	Δ λ	I=20mA	----	20	----	Nm
Luminous Intensity	I _V	I=20mA	300		450	mcd
50%Power Angle	2 θ 1/2	I=20mA	----	120	----	deg

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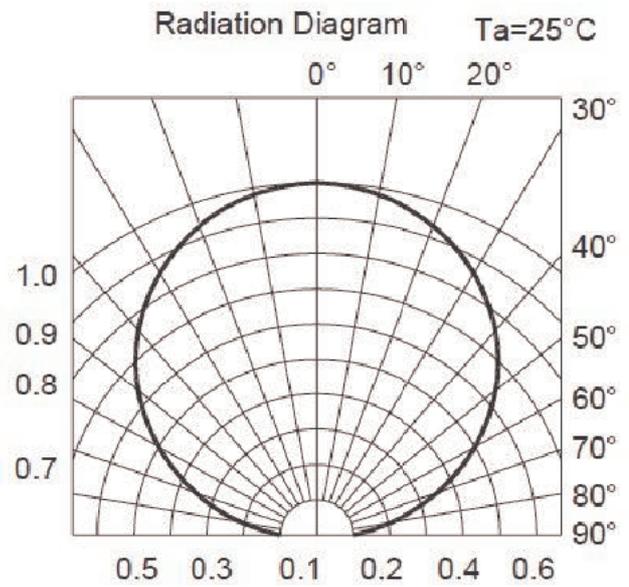
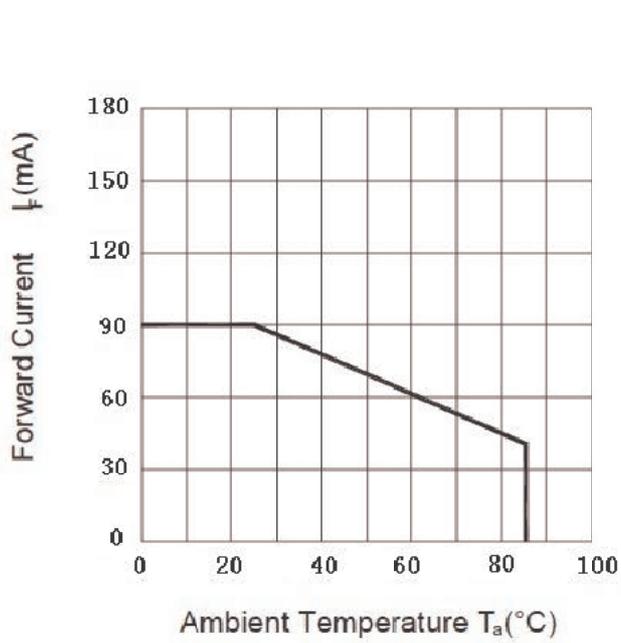
Typical Electrical/Optical Characteristic Curves ($I_f=60\text{mA}; T_A=25^\circ\text{C}$)



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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=20mA	1000hrs	30pcs	0/1
Environment test	Thermal shock Test	-10±5°C ↔ +100±5°C 5min 10sec 5min	50cycles	30pcs	0/1
	Temperature cycle test	-40±5°C ↔ +85±5°C 30min 5sec 30min	50cycles	30pcs	0/1
	High temperature & High humidity test	Ta=85±5°C RH=85%±0.5%RH	1000hrs	30pcs	0/1
	High temperature storage	Ta =100±5°C	1000hrs	30pcs	0/1
	Low temperture storage	Ta =-55±5°C	1000hrs	30pcs	0/1
Mechanical test	Resistance to soldering heat	Ta =230±5°C	5sec	30pcs	0/1
	Lead integrity	Load 2.5N(0.25KGf) 0°C ∞ 90°C ∞ 0°C	3times	30pcs	0/1