

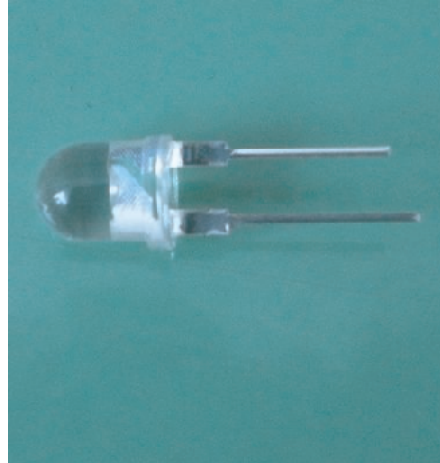
Model no: SX834RE-660

1W 8mm 660nm red power led

Specification for Approval

● Feature

- Chip material : Ga AlAs
- Emitted color : deep red
- 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.

Model no: SX834RE-660

1W 8mm 660nm red power led

Specification for Approval

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	770	mW
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)

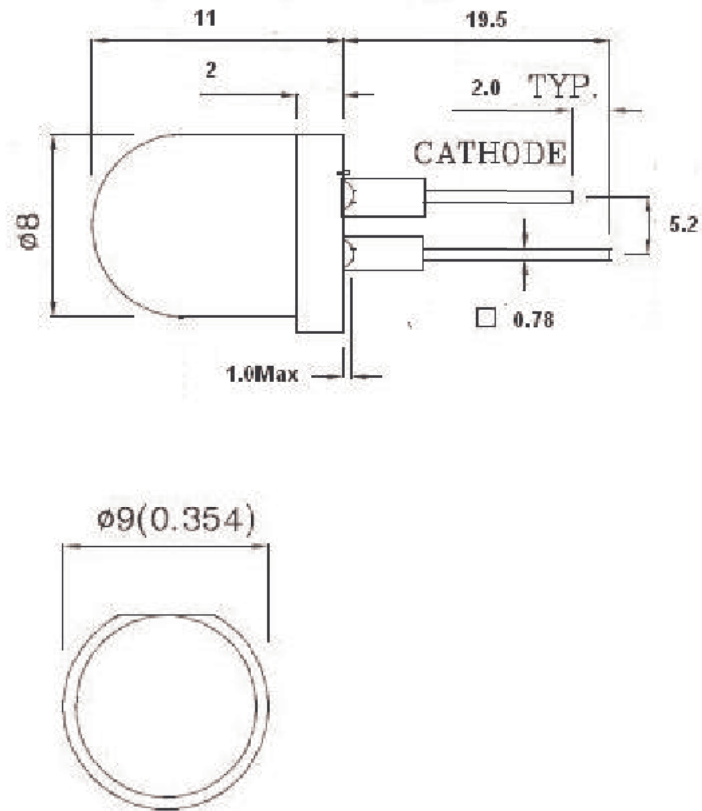
Item	Symbol	condition	Min	Type	Max	Unit
DC forward Voltage	V_F	I=350mA	1.95	2.2	2.3	V
DC reverse Current	I_R	V=5V	----	----	10	μ A
Peak wavelength	λ	I=350mA	655		661	nm
Spectrum Radiation Bandwidth	$\Delta \lambda$	I=350mA	----	28	----	Nm
Luminous Intensity	I_V	I=350mA	24000	----	29000	MCD
			15		25	LM
50%Power Angle	$2\theta_{1/2}$	I=350mA	----	30	----	deg

NOTES:

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

Model no: SX834RE-660
1 W 8mm 660nm red power led

Specification for Approval



Notes.

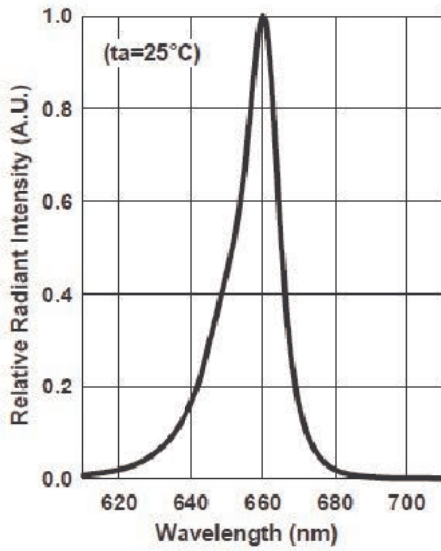
1. Dimensions are in millimeters.
2. Tolerances for fixed dimensions are ± 0.25 mm

Model no: SX834RE-660

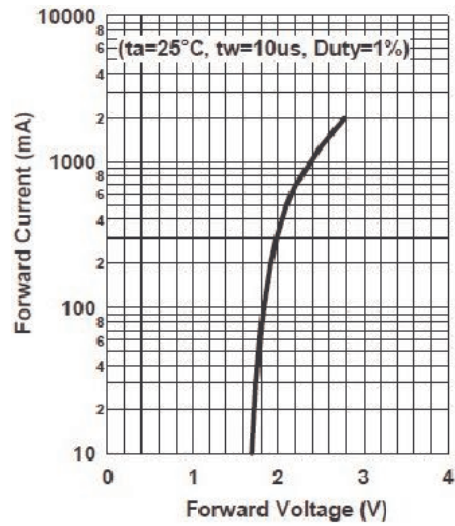
1W 8mm 660nm red power led

Specification for Approval

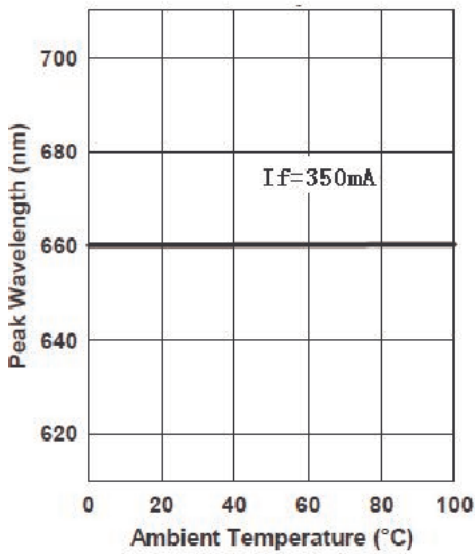
Relative Spectral Emission



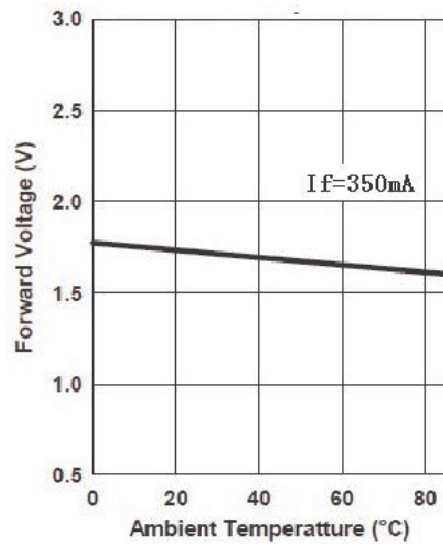
Forward Current - Forward Voltage



Peak Wavelength - Ambient Temperature



Forward Voltage - Ambient Temperature

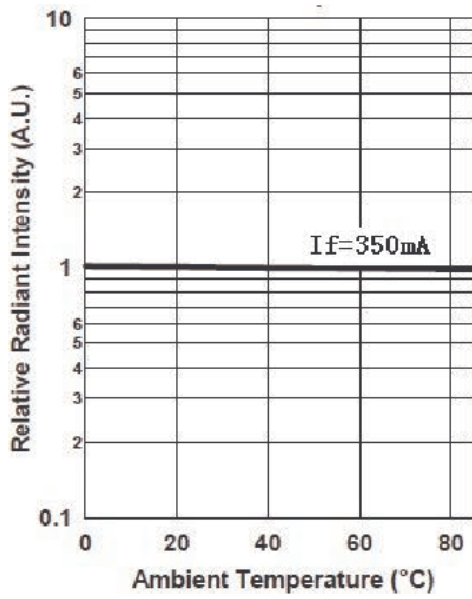


Model no: SX834RE-660

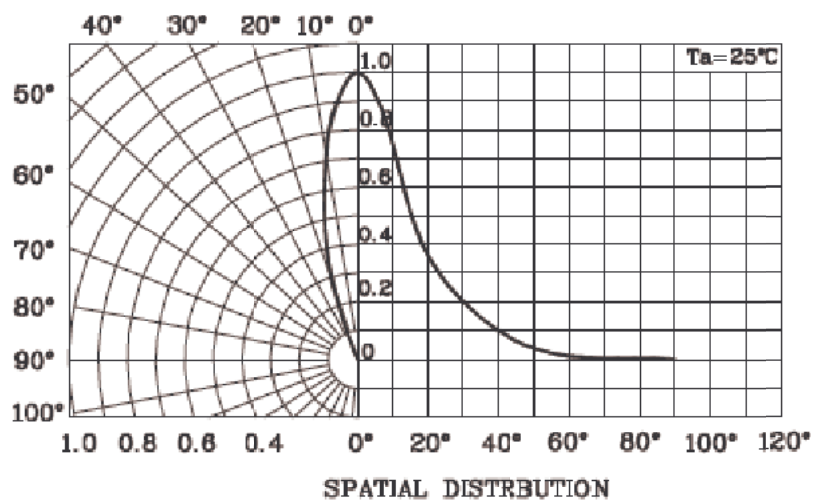
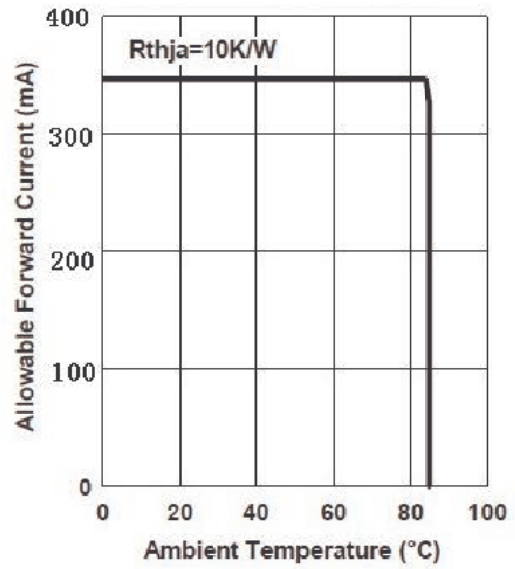
1W 8mm 660nm red power led

Specification for Approval

Relative Radiant Intensity -
Ambient Temperature



Allowable Forward Current -
Ambient Temperature



Model no: SX834RE-660

1W 8mm 660nm red power led

Specification for Approval

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