

SKI-FF530**IRED****1. Feature**

The **SKI-FF530** is a infrared emitting diode which mounted high power **850 nm IR CHIP**.

It is encapsulated in water clear epoxy resin with 5mm diameter.

The radiation substrate material is **AlGaAs**.

High output power even of a low drive current.

Fast response time

2. Absolute maximum ratings.

(Ta = 25)

Parameter	Symbol	Ratings	Unit
Forward current	I_F	100	mA
Reverse voltage	V_R	5	V
Peak forward current	I_{FM}	1	A
Power dissipation	P_D	150	mW
Operation temperature	Topr.	- 20 + 80	
Storage temperature	Tstg.	- 30 + 100	
Soldering temperature	Tsol.	260 (within 5 sec)	

3. Electrical/optical characteristics.

(Ta = 25)

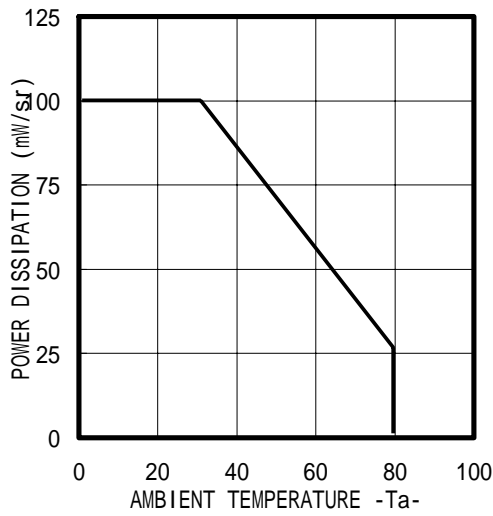
Parameter	Symbol	Test condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 50 \text{ mA}$		1.45	1.80	V
Reverse current	I_R	$V_R = 5 \text{ V}$			10	μA
*Radiant intensity	P_0	$I_F = 50 \text{ mA}$	35	62		mW/ sr
Peak light emitting wavelength	λ_p	$I_F = 50 \text{ mA}$		850		nm
Spectral half wave width		$I_F = 50 \text{ mA}$		20		nm
Viewing angle	$\frac{1}{2}$	$I_F = 50 \text{ mA}$		± 30		deg
Response time	t_r	$I_F = 50 \text{ mA}$		30		ns

*Luminous intensity measuring equipment : OPTRONIC CABORATORIES OL-703C PROGRAMMABLE RADIOMETER.

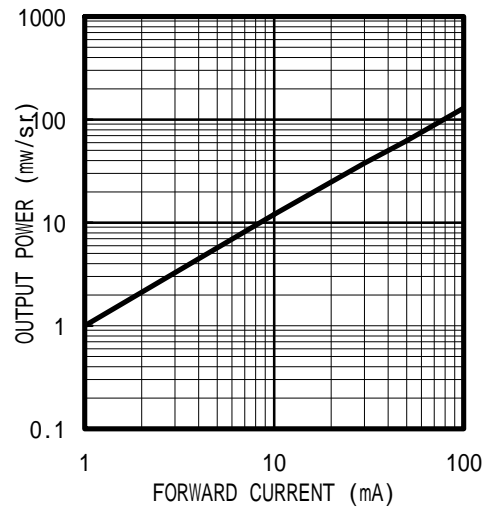
SKI-FF530

Characteristics diagrams

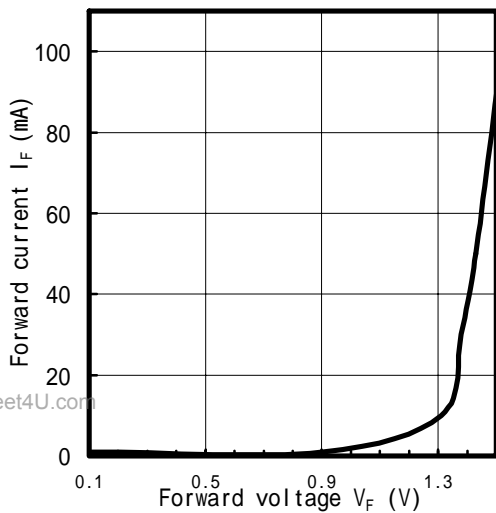
Power dissipation vs ambient temperature.



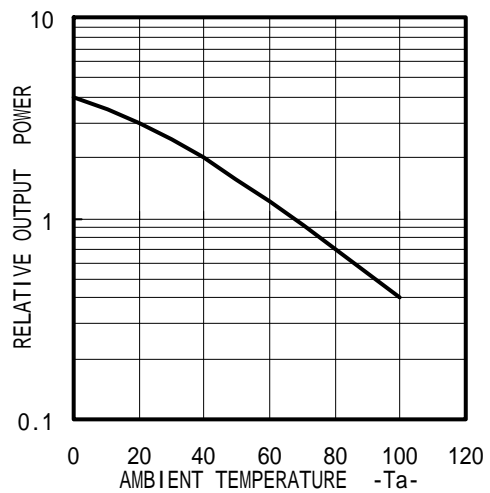
Output power vs forward current.



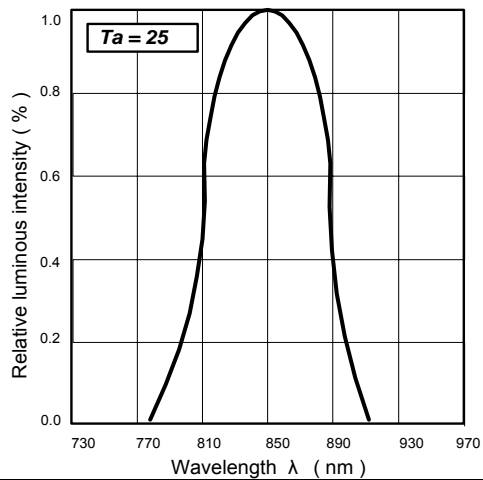
Forward current vs forward voltage.



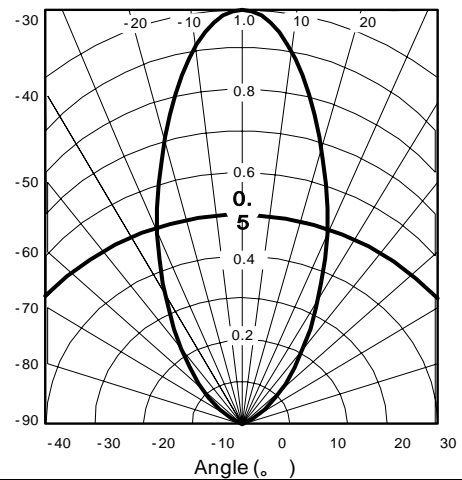
Relative output power vs ambient temperature.



Spectral distribution.

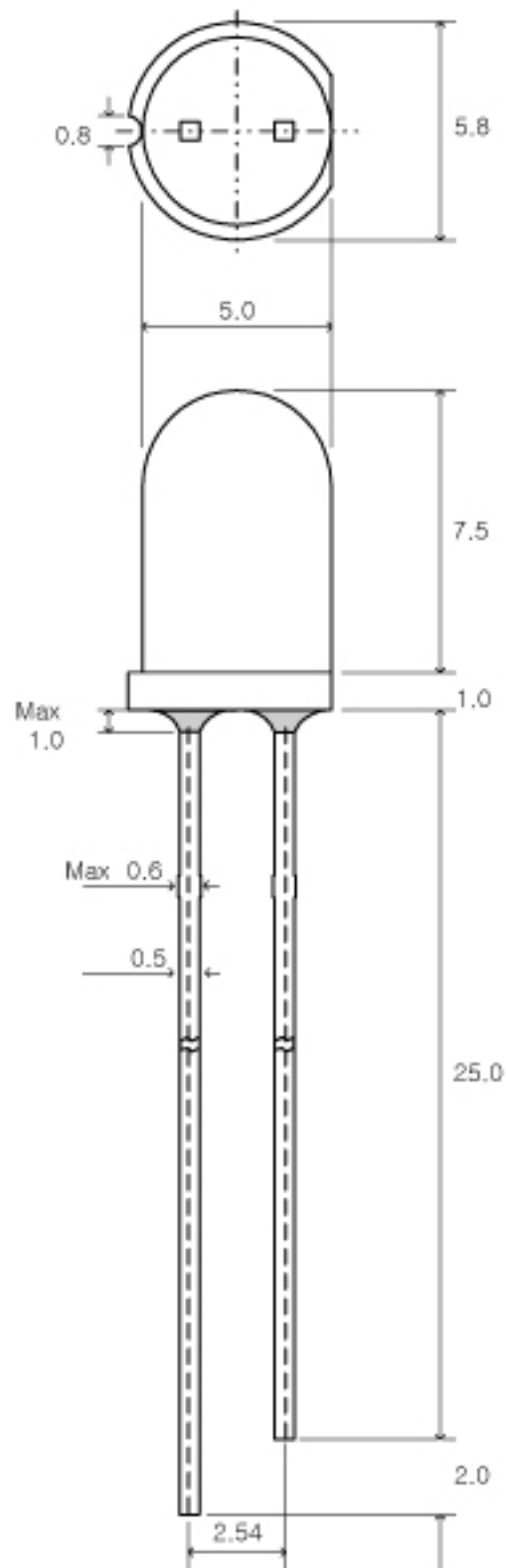


Radiation pattern.



SKI-FF530

DIMENSIONS



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NOTES.

1. All dimensions are in mm.
2. The magnification is 5 : 1.
3. Tolerances are ± 0.2 mm unless otherwise noted.
4. Electrode:

