

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)	

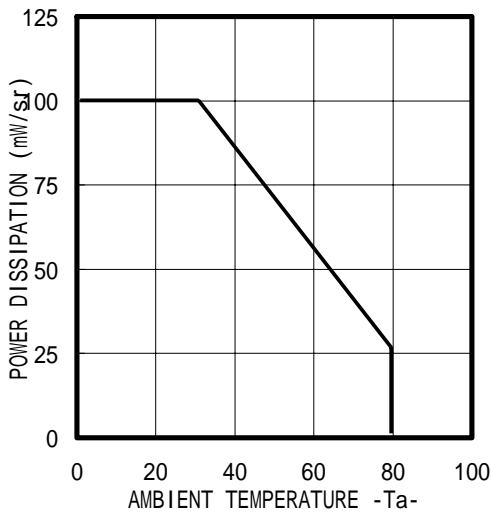
3. Electrical/optical characteristics.

(Ta = 25)

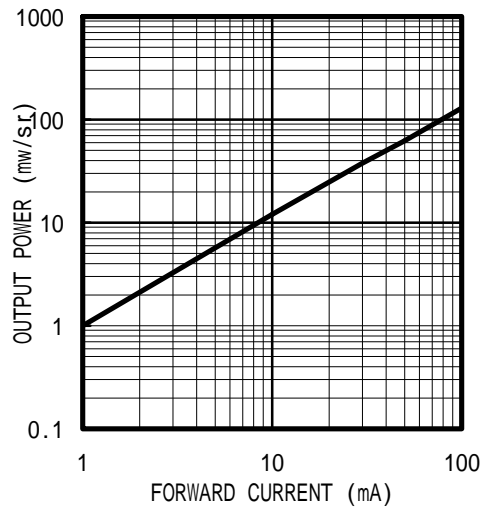
Parameter	Symbol	Test condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 50 \text{ mA}$		1.45	1.80	V
Reverse current	I_R	$V_R = 5 \text{ V}$			10	μA
*Radiant intensity	P_0	$I_F = 50 \text{ mA}$	35	62		mW/sr
Peak light emitting wavelength	λ_p	$I_F = 50 \text{ mA}$		850		nm
Spectral half wave width		$I_F = 50 \text{ mA}$		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 LABORATORIES OL-703C PROGRAMMABLE RADIOMETER.

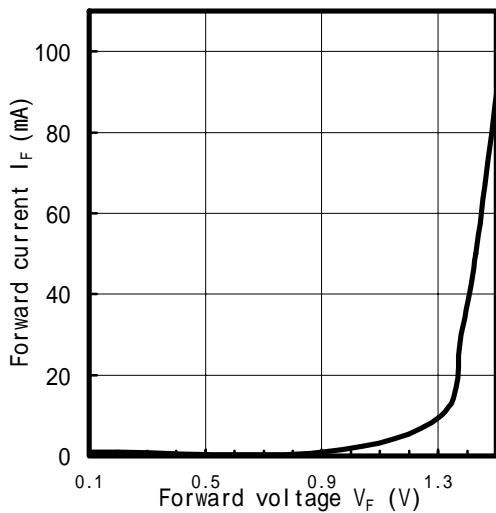
Power dissipation vs ambient temperature.



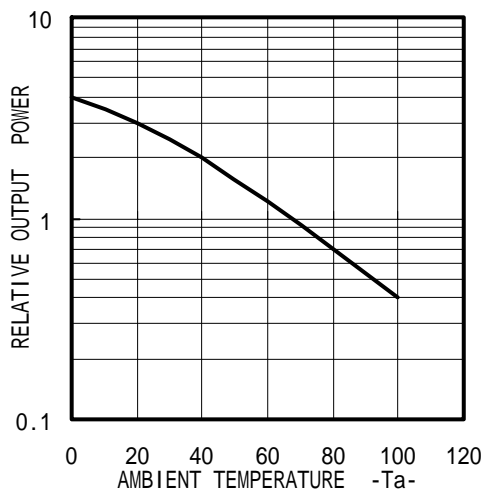
Output power vs forward current.



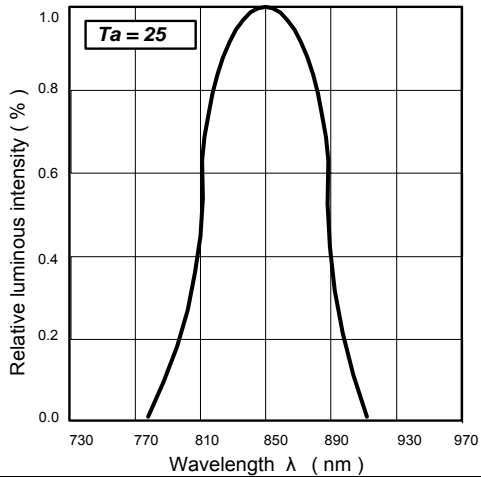
Forward current vs forward voltage.



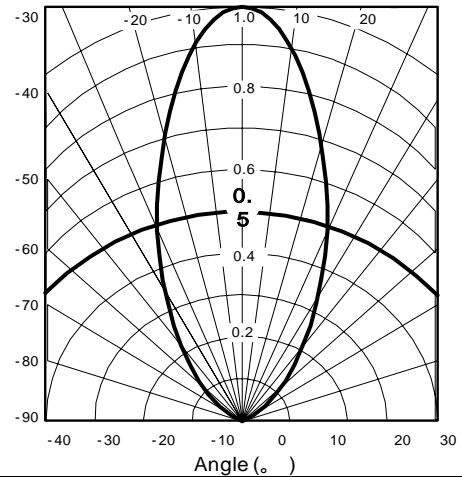
Relative output power vs ambient temperature.

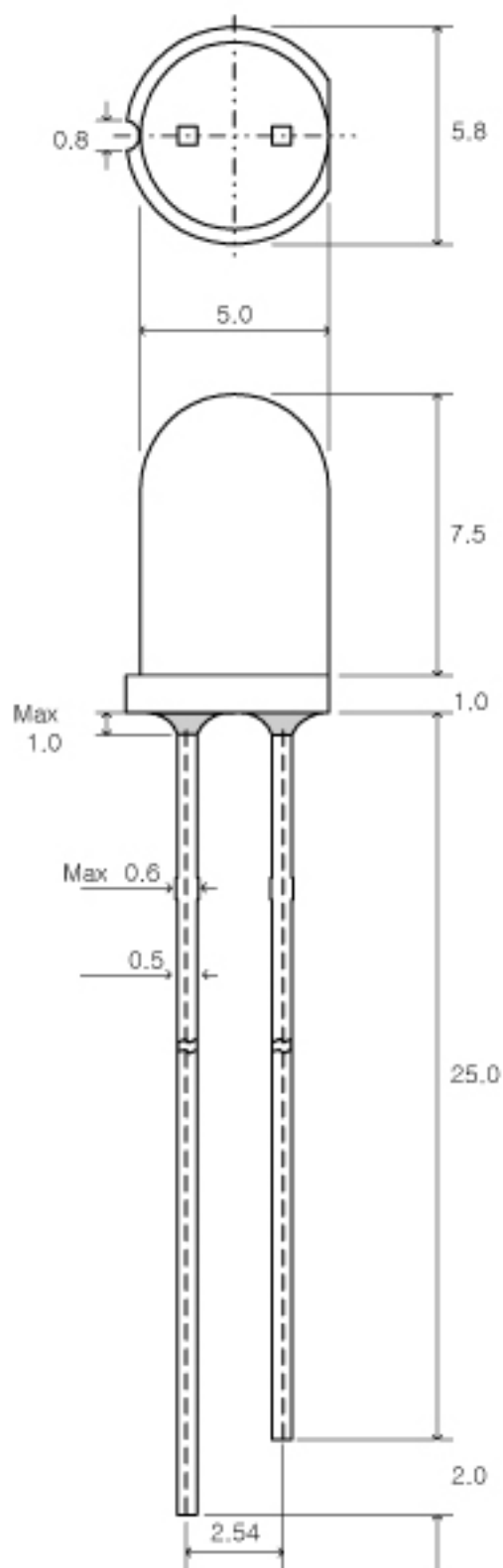


Spectral distribution.



Radiation pattern.





NOTES.

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

