

R85-26GSE

1. Color	Infrared
2. Material	AlGaAs / Ge
3. Electrode	N side (cathode) : Au / P side (anode) : Au
4. Electrode pattern	(Figure 1)
5. Chip size	240μm×240μm×190μm (Figure 1)
6. Electro-Optical characteristics (Ta=25°C)	(Table 1)
7. Absolute maximum rating	(Table 2, Figure 2)
8. Technical data	
8-1. Characteristic curves	(Figure 3~9)
8-2. Reliability	(Figure 10~12)
9. Features	
- High-speed response (Tr typ. : 11ns, Tf typ. : 7ns)	
- Good reliability	
- Good temperature characteristics	
- High power	

Figure 1. Electrode pattern and Chip size (Unit : μm)

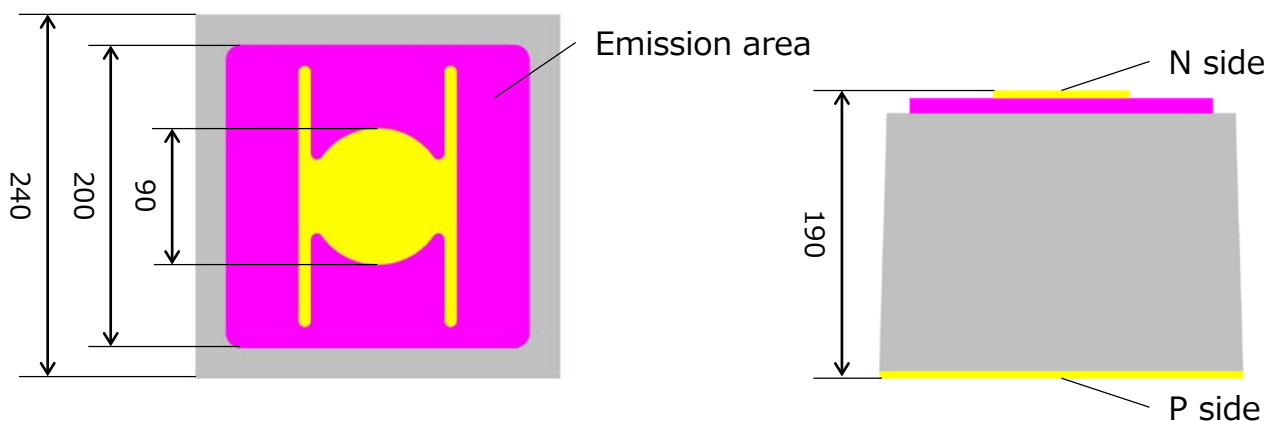


Table 1. Electro-Optical characteristics (Ta=25°C)

Parameters	Symbol	Condition	Min.	Typ.	Max.	Unit
Power*	Po	IF=20mA	6.5	7.5	9.5	mW
Forward Voltage	VF	IF=20mA	1.50	1.60	1.70	V
Peak Wavelength	λp	IF=20mA	840	850	860	nm
Reverse Current	IR	VR=5V	—	—	10	μA

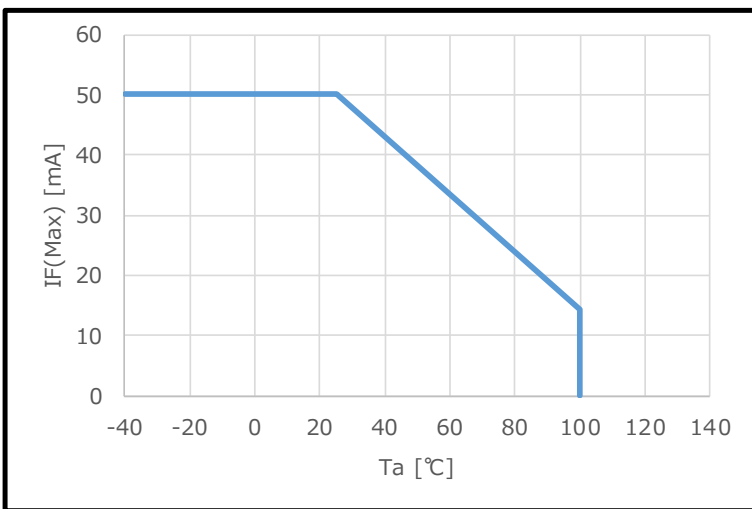
* Power : Measurement at SHOWA DENKO PHOTONICS.

Marketing Department
 Email : Sdk_Elled@showadenko.com

Table 2. Absolute maximum rating

Item	Symbol	Rating	Unit
Forward Current	IF	50	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	130	°C

Figure 2. Ta-Absolute maximum rated current



SHOWA DENKO PHOTONICS' standard condition : LED chip mounted on TO-18 gold header, without resin coating.

- * The absolute Maximum Rating means that there is a possibility to break down if exceeded momentarily, and does not guarantee to use on this condition considering reliability.
- * You should establish the absolute Maximum Ratings of device after packaging under your responsibility, as those largely depend on the design of package and packaging condition.

The information contained herein is believed to be reliable. However, no representations, guaranties or warranties of any kind are made as to accuracy and suitability of the Product for particular applications or the results of its use. SHOWA DENKO PHOTONICS reserves the right to introduce changes without notice.

Marketing Department
Email : Sdk_Elled@showadenko.com

Characteristic curves (TO-18 stem without resin)

Figure 3. IF-Po (Ta=25°C)

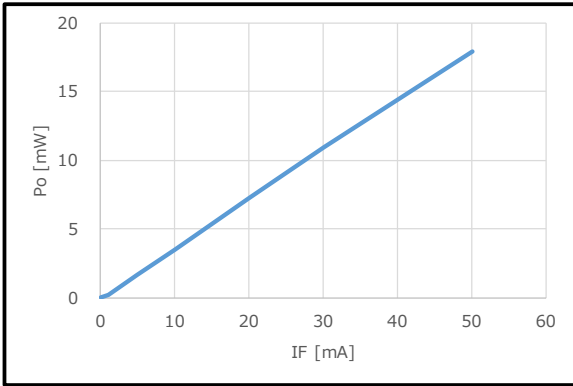


Figure 7. Ta-Relative Po

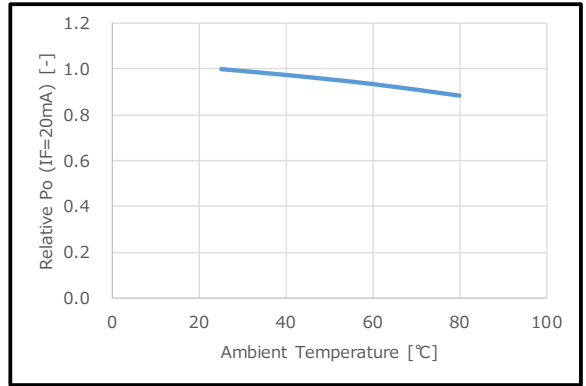


Figure 4. VF-IF (Ta=25°C)

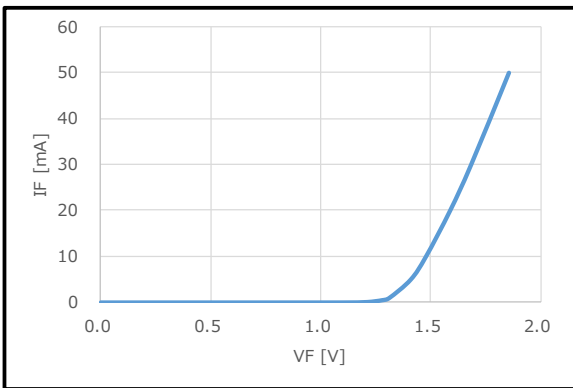


Figure 8. Ta-VF

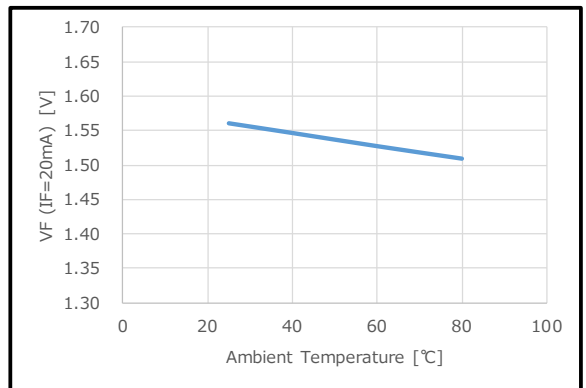


Figure 5. Emission spectrum (Ta=25°C)

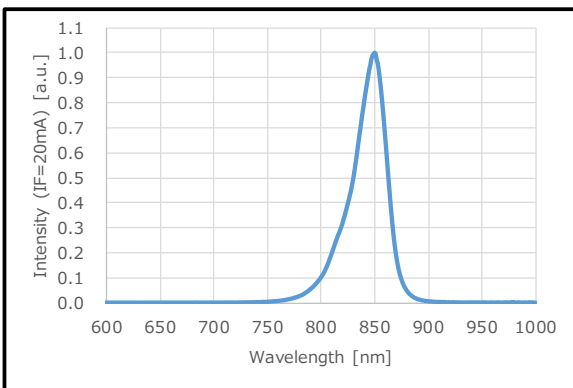


Figure 9. Ta-λp

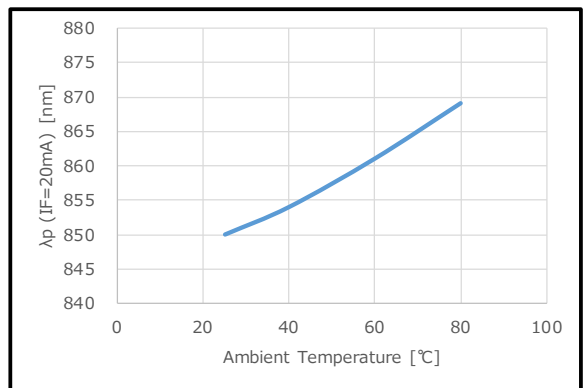
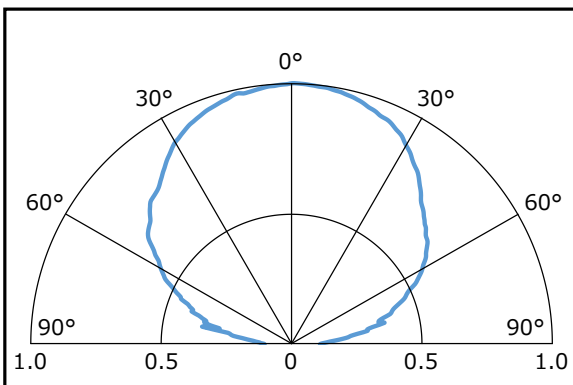


Figure 6. Emission distribution (Ta=25°C)



Marketing Department
Email : Sdk_Elled@showadenko.com

Reliability (TO-18 stem without resin)

Figure 10. 25°C 50mA 1,000h test

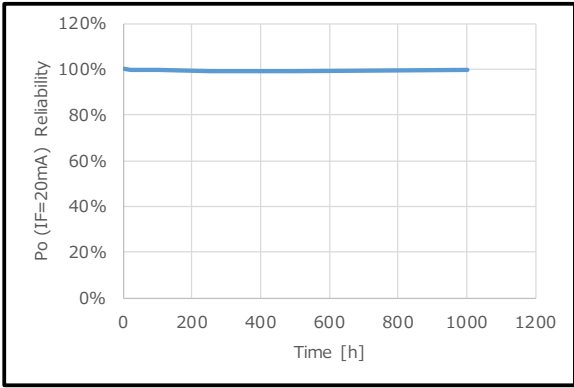


Figure 11. 125°C 50mA 1,000h test

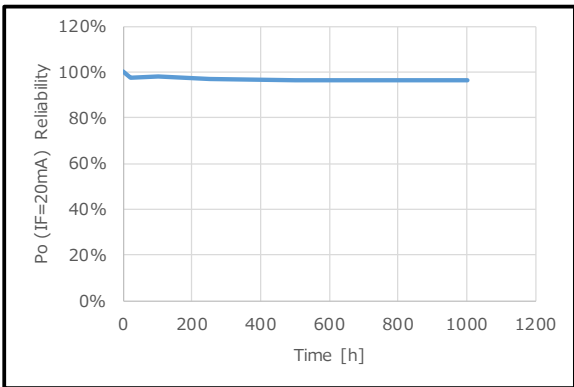


Figure 12. 150°C 20mA 1,000h test

