

> Mechanical Specification:

(1) Dimension

- Chip size: 39mil x 39mil ($1000 \pm 25 \mu\text{m} \times 1000 \pm 25 \mu\text{m}$)
- Thickness: $150 \pm 10 \mu\text{m}$
- Anode pad: $760 \pm 10 \mu\text{m} \times 310 \pm 10 \mu\text{m}$
- Cathode pad: $865 \pm 10 \mu\text{m} \times 360 \pm 10 \mu\text{m}$

(2) Metallization

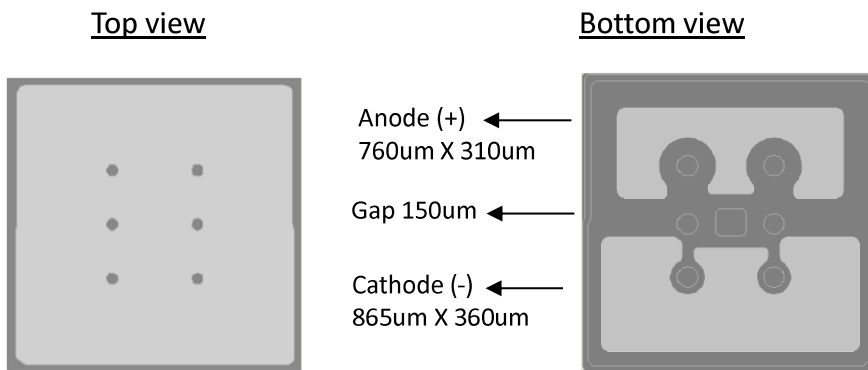
- Electrode pad: AuSn

Features:

- For flux eutectic, direct eutectic process, not suitable for solder
- High Power Density
- Low Rth and Long life time

Applications:

- Automotive



> Electro-optical Characteristics at 25°C: ⁽¹⁾

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	Vf1	If = 10μA	1.6	-	-	V
	Vf2	If = 1A	-	3.2	3.4	V
Reverse Current	Ir	Vr = 5V	-	-	2.0	uA
Dominant Wavelength ⁽²⁾	λd	If = 1A	445	-	460	nm
Spectra Half-width	Δλ	If = 1A	-	19	-	nm
Radiant Flux ⁽³⁾⁽⁴⁾	Po	If = 1A	1350	-	1400	mW
			1400	-	1450	
			1450	-	1500	
			1500	-	1550	
			1550	-	1600	

Note:

(1) ESD protection during chip handling is recommended.

(2) Basically, the wavelength span is 10nm; however, customers' special requirements are also welcome.

(3) Radiant flux is determined by EPISTAR standard.

(4) Radiant flux measurement allows a tolerance of ±15%.

> Absolute Maximum Ratings:

Parameter	Symbol	Condition	Rating	Unit
Forward DC Current	If	Ta = 25°C	≤ 1.5	A
Reverse Voltage	Vr	Ta = 25°C	≤ 5	V
Junction Temperature	Tj	-	≤ 125	°C
Storage Temperature	Tstg	Chip	-40 ~ +85	°C
		Chip-on-tape/storage	5 ~ 35	°C
		Chip-on-tape/transportation	-20 ~ +65	°C
Temperature during Packaging	-	-	280(<10sec)	°C

Note: Maximum ratings are package dependent. The above maximum ratings were determined using by EPISTAR standard. Forward current and junction temperature will cause the damage of LEDs if over the absolute maximum ratings.

> Characteristic Curves:

Fig.1 – Relative luminous Intensity vs. Forward Current

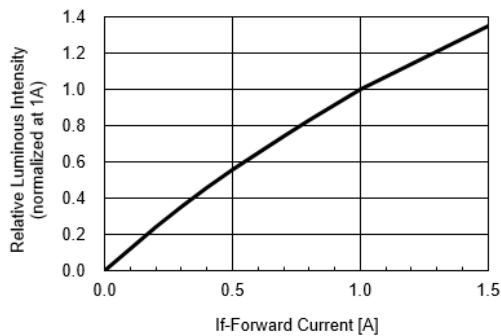


Fig.2 – Forward Current vs. Forward Voltage

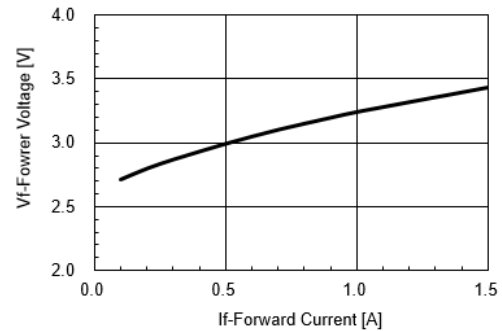


Fig.3 – Relative Radiant Flux(@1A) vs. Ambient Temperature

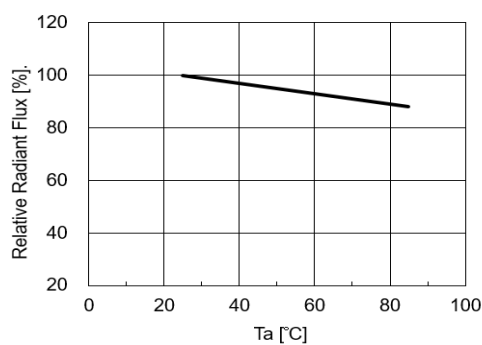


Fig.4 – Forward Voltage (@1A) vs. Ambient Temperature

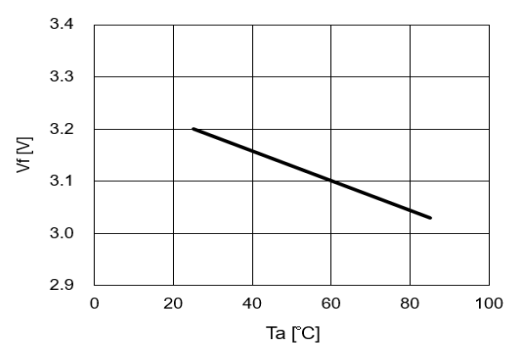


Fig.5 – Dominant Wavelength (@1A) vs. Ambient Temperature

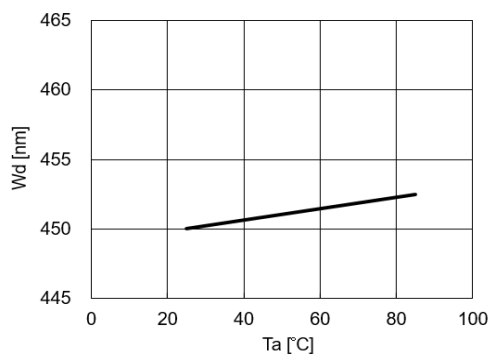


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 125°C)

