

### > Mechanical Specification:

#### (1) Dimension

- Chip size: 32 mil x 32 mil ( $813 \pm 25 \mu\text{m} \times 813 \pm 25 \mu\text{m}$ )
- Thickness: 5.9 mil ( $150 \pm 10 \mu\text{m}$ )
- Anode pad: 27 mil x 10.5 mil ( $683 \pm 10 \mu\text{m} \times 266.5 \pm 10 \mu\text{m}$ )
- Cathode pad: 27 mil x 10.5 mil ( $683 \pm 10 \mu\text{m} \times 266.5 \pm 10 \mu\text{m}$ )

#### (2) Metallization

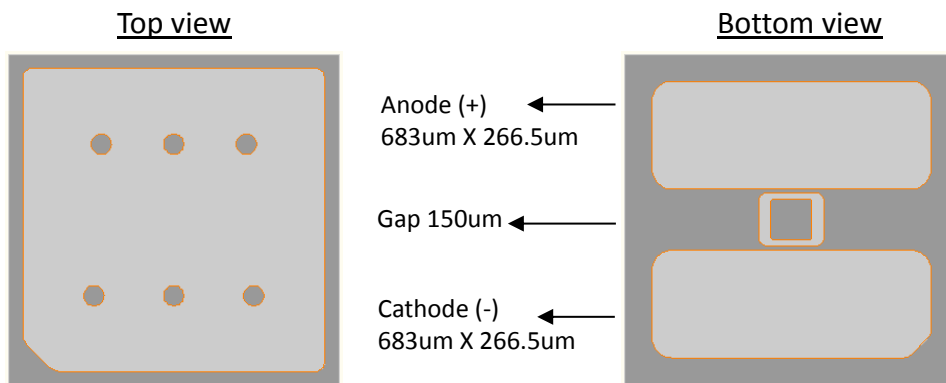
- Electrode pad: AuSn  
(For flux eutectic, direct eutectic process, not suitable for solder)

#### Features:

- Compatible with Eutectic and Solder Process
- High Power Density
- Low Rth and Long life time

#### Applications:

- Flash



### > Electro-optical Characteristics at 25°C: <sup>(1)</sup>

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Forward Voltage	Vf1	If = 10μA	1.6	-	-	V	
	Vf2	If = 700mA	-	3.2	3.4	V	
Reverse Current	Ir	Vr = 5V	-	-	2.0	μA	
Dominant Wavelength <sup>(2)</sup>	λd	If = 700mA	445	-	465	nm	
Spectra Half-width	Δλ	If = 700mA	-	25	-	nm	
Radiant Flux <sup>(3)(4)</sup>	Po	A97	If = 700mA	750	-	800	mW
		A98		800	-	850	
		A99		850	-	900	

Note:

(1) ESD protection during chip handling is recommended.

(2) Basically, the wavelength span is 20nm; 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	≤ 800	mA
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

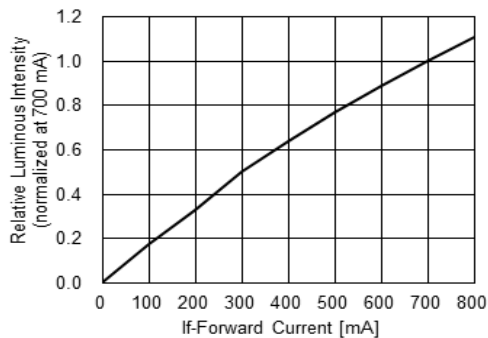


Fig.2 – Forward Current vs. Forward Voltage

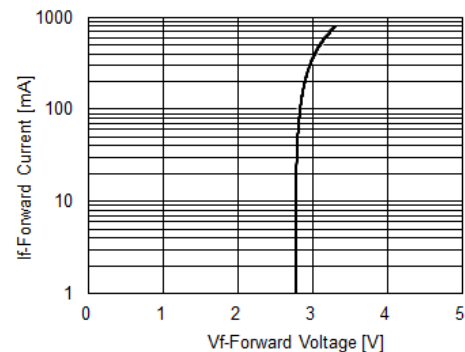


Fig.3 – Relative Intensity (@700mA) vs. Ambient Temperature

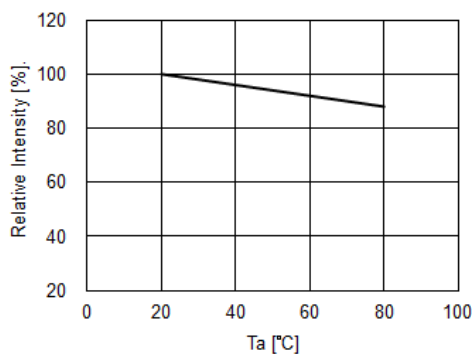


Fig.4 – Forward Voltage (@700mA) vs. Ambient Temperature

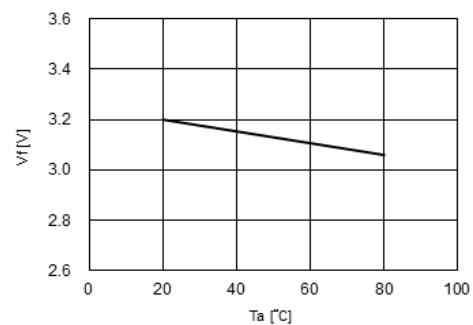


Fig.5 – Dominant Wavelength (@700mA) vs. Ambient Temperature

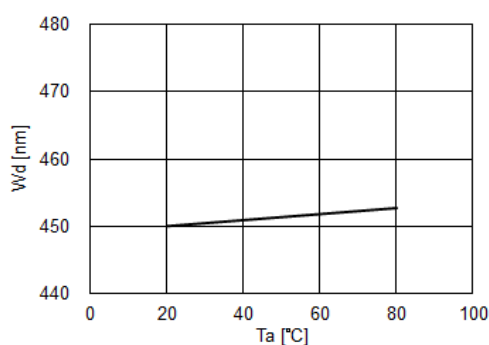


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 125°C)

