

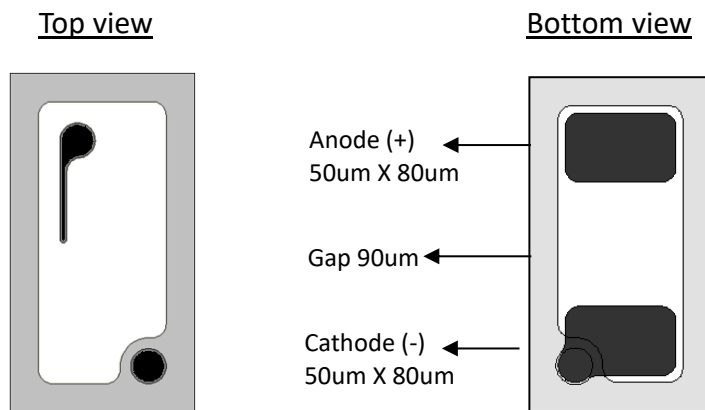
> Mechanical Specification:

(1) Dimension

- Chip size: 5mil x 9mil ($130 \pm 25 \mu\text{m} \times 240 \pm 25 \mu\text{m}$)
- Thickness: 3.9mil ($100 \pm 10 \mu\text{m}$)
- Anode pad: $50 \pm 10 \mu\text{m} \times 80 \pm 10 \mu\text{m}$
- Cathode pad: $50 \pm 10 \mu\text{m} \times 80 \pm 10 \mu\text{m}$

(2) Metallization

- Electrode pad: Au



Features:

- High Power Density
- Low Rth and Long life time

Applications:

- RGB Display Signage

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Forward Voltage	Vf1	If = 10μA	1.8	-	-	V	
	Vf2	If = 1mA	-	2.4	2.7	V	
Reverse Current	Ir	Vr = 10V	-	-	0.5	uA	
Dominant Wavelength ⁽²⁾	λ_d	If = 1mA	525	-	540	nm	
Spectra Half-width	$\Delta\lambda$	If = 1mA	-	35	-	nm	
Luminous intensity ⁽³⁾	Iv	I13	If = 1mA	70	-	90	mcd
		I14		90	-	110	
		I15		110	-	130	
		I16		130	-	150	

Note:

(1) ESD protection during chip handling is recommended.

(2) Basically, the wavelength span is 15nm; however, customers' special requirements are also welcome.

(3) Luminous intensity is measured by EPISTAR's equipment on bare chips.

> Absolute Maximum Ratings:

Parameter	Symbol	Condition	Rating	Unit
Forward DC Current	If	Ta = 25°C	≤ 20	mA
Reverse Voltage	Vr	Ta = 25°C	≤ 10	V
Junction Temperature	Tj	-	≤ 115	°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	-	-	260(<5sec)*	°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.

*Reflow soldering should not be done more than two times.

> Characteristic Curves:

Fig.1 – Relative luminous Intensity vs. Forward Current

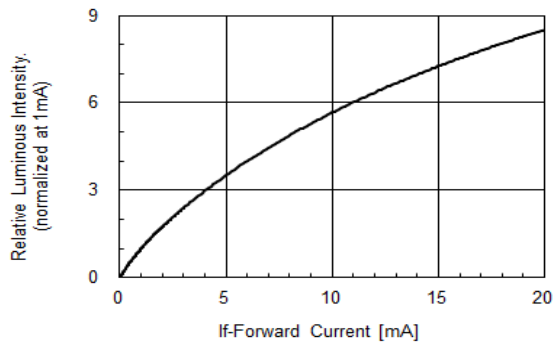


Fig.2 – Forward Current vs. Forward Voltage

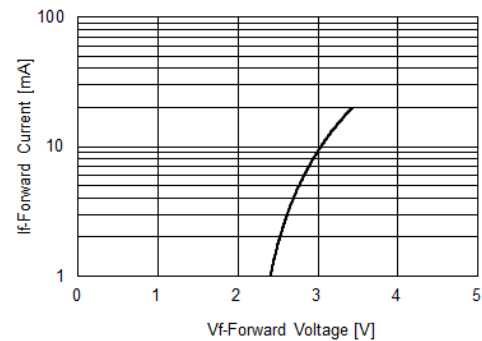


Fig.3 – Relative Intensity (@1mA) vs. Ambient Temperature

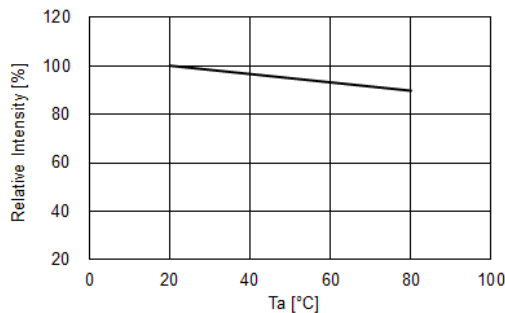


Fig.4 – Forward Voltage (@1mA) vs. Ambient Temperature

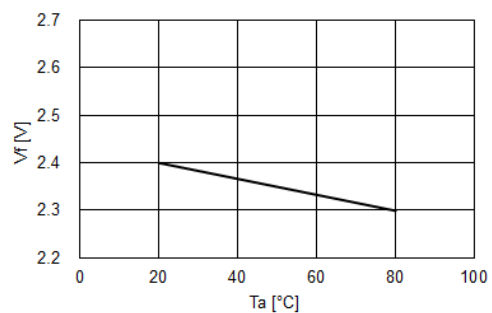


Fig.5 – Dominant Wavelength (@1mA) vs. Ambient Temperature

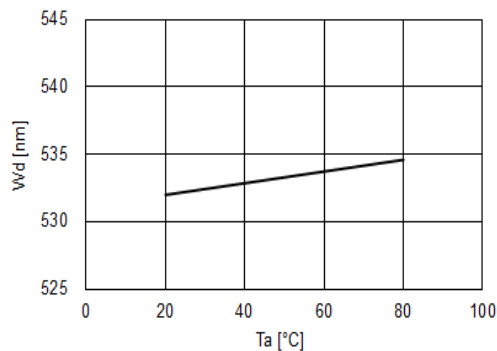


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 115°C)

