

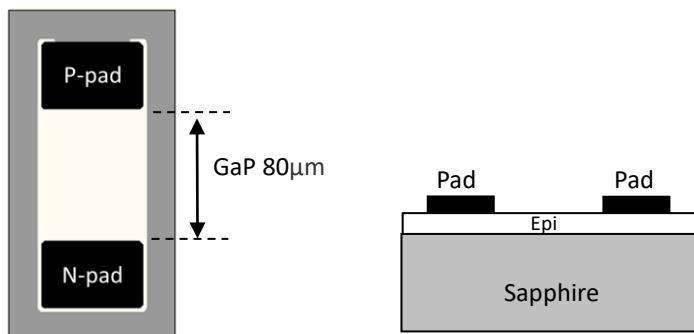
> Mechanical Specification:

(1) Dimension

- Chip size: 4 mil x 8 mil ($108\pm15 \mu\text{m} \times 204\pm15 \mu\text{m}$)
- Thickness: 3.1 mil ($80\pm10 \mu\text{m}$)
- P pad: $41\pm10 \mu\text{m} \times 61\pm10 \mu\text{m}$
- N pad: $41\pm10 \mu\text{m} \times 61\pm10 \mu\text{m}$

(2) Metallization

- Electrode pad: Au



Features:

- Compatible with Solder Process
- Low R_{th} and Long life time

Applications:

- RGB Display Signage
- RGB TV

> Electro-optical Characteristics at 25°C:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _{f1}	I _f = 10μA	1.3	-	-	V
	V _{f2}	I _f = 1mA	-	1.9	2.1	V
Reverse Current	I _r	V _r = 10V	-	-	0.5	μA
Peak Wavelength	λ _p	I _f = 1mA	-	629	-	nm
Dominant Wavelength ⁽¹⁾	λ _d	I _f = 1mA	619	-	629	nm
Spectra Half-width	Δλ	I _f = 1mA	-	15	-	nm
Luminous Intensity ⁽²⁾⁽³⁾	I _v	I _f = 1mA	15	-	20	mcd
			20	-	25	
			25	-	30	

Note:

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

(2) 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	T _a = 25°C	≤ 10	mA
Reverse Voltage	V _r	T _a = 25°C	≤ 10	V
Junction Temperature	T _j	-	≤ 115	°C
Storage Temperature	T _{stg}	Chip	-40 ~ +85	°C
		Chip-on-tape/storage	5 ~ 35	°C
		Chip-on-tape/transportation	-20 ~ +65	°C

Note: Maximum ratings are package dependent. The above maximum ratings were determined using by EPISTAR standard. Stresses in excess of the absolute maximum ratings such as forward current and junction temperature may cause damage to the LED.

> Characteristic Curves:

Fig.1 –Relative luminous Intensity vs. Forward Current

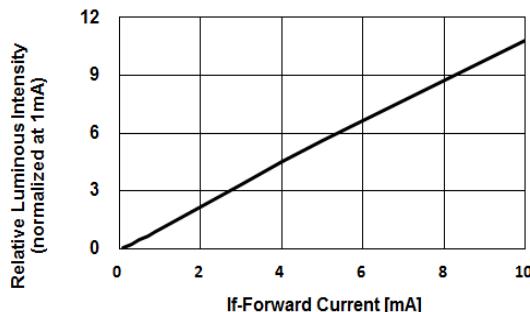


Fig.3 –Relative Intensity (@1mA) vs. Ambient Temperature

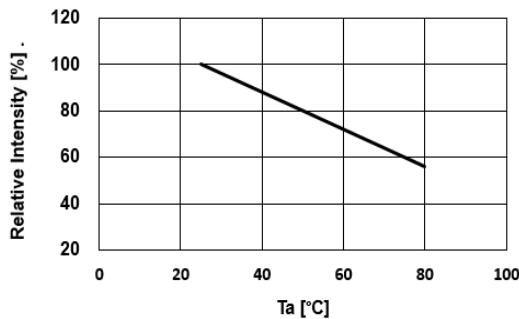


Fig.5 – Dominant Wavelength (@1mA) vs. Ambient Temperature

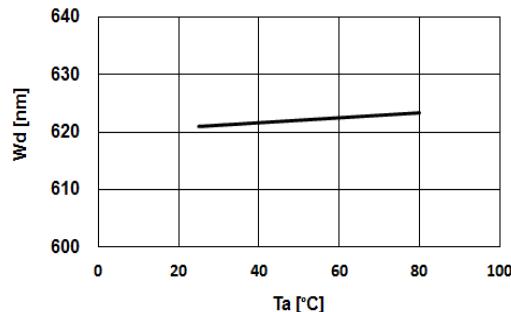


Fig.2 – Forward Current vs. Forward Voltage

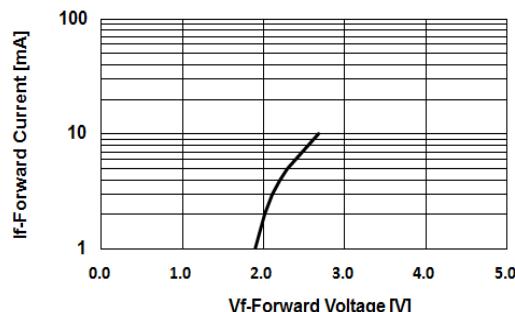


Fig.4 – Forward Voltage (@1mA) vs. Ambient Temperature

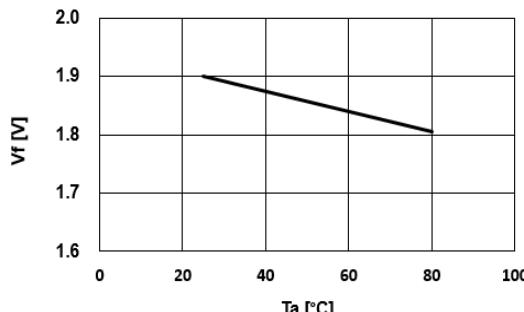


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on T_j max. = 115°C)

