

# LNJ167W8RRA

## Hight Bright Surface Mounting Chip LED

ESS Type

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

- Green

Parameter	Symbol	Rating	Unit
Power dissipation	$P_D$	55	mW
Forward current	$I_F$	20	mA
Pulse forward current *	$I_{FP}$	60	mA
Reverse voltage	$V_R$	4	V
Operating ambient temperature	$T_{opr}$	-30 to +85	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +100	$^\circ\text{C}$

Note) \*: The condition of  $I_{FP}$  is duty 10%, Pulse width 1 msec.

### ■ Lighting Color

- Green
- Red

- Red

Parameter	Symbol	Rating	Unit
Power dissipation	$P_D$	55	mW
Forward current	$I_F$	20	mA
Pulse forward current *	$I_{FP}$	60	mA
Reverse voltage	$V_R$	4	V
Operating ambient temperature	$T_{opr}$	-30 to +85	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +100	$^\circ\text{C}$

Note) \*: The condition of  $I_{FP}$  is duty 10%, Pulse width 1 msec.

### ■ Electro-Optical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

- Green

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity *1	$I_O$	$I_F = 5 \text{ mA}$	4.0	7.5	37.0	mcad
Forward current	$I_R$	$V_R = 4 \text{ V}$			100	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 5 \text{ mA}$		1.95	2.30	V
Peak emission wavelength	$\lambda_p$	$I_F = 5 \text{ mA}$		575		nm
Dominant emission wavelength *2	$\lambda_d$	$I_F = 5 \text{ mA}$	561	572	576	nm
Spectral half band width	$\Delta\lambda$	$I_F = 5 \text{ mA}$		15		nm

Note) \*1: Measurement tolerance:  $\pm 20\%$

\*2: Measurement tolerance:  $\pm 3 \text{ nm}$

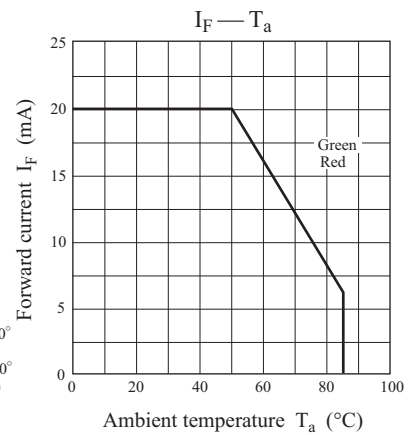
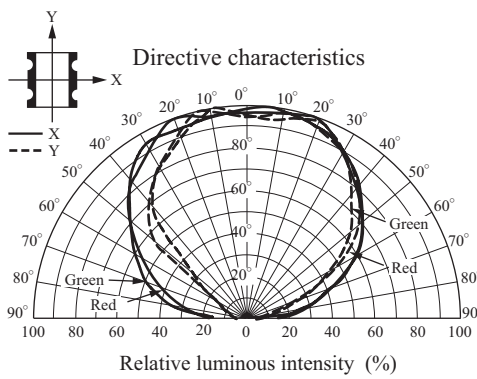
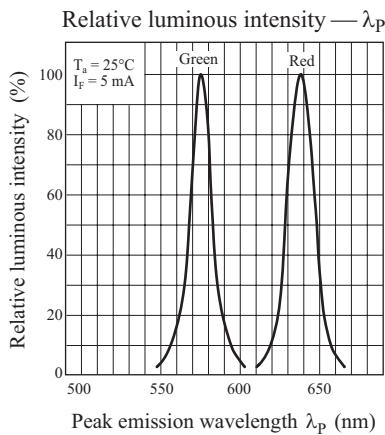
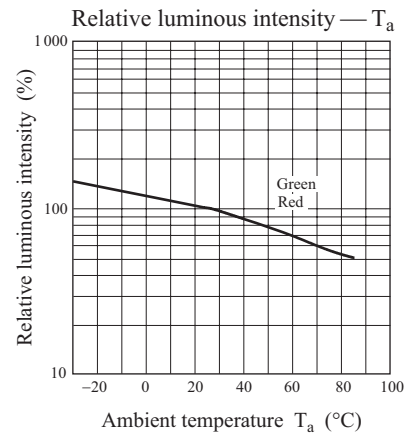
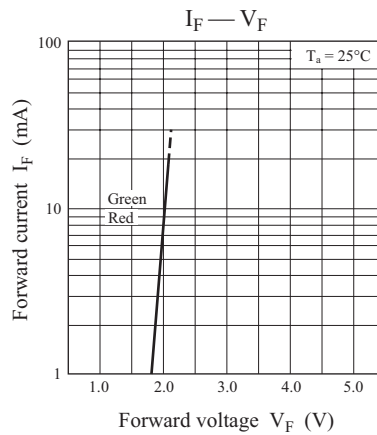
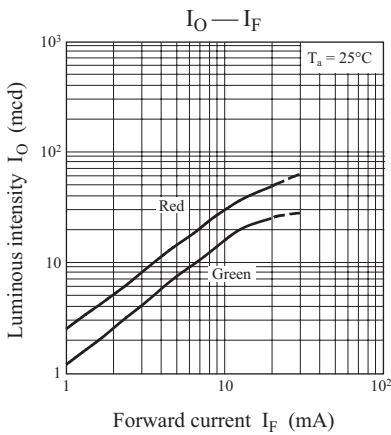
■ Electro-Optical Characteristics (Continued)  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

• Red

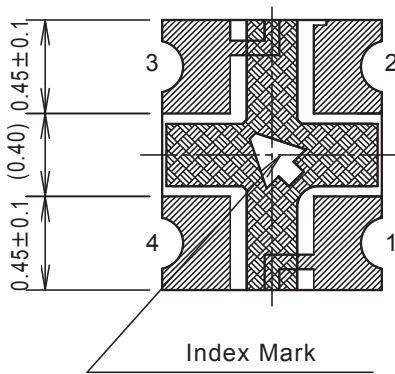
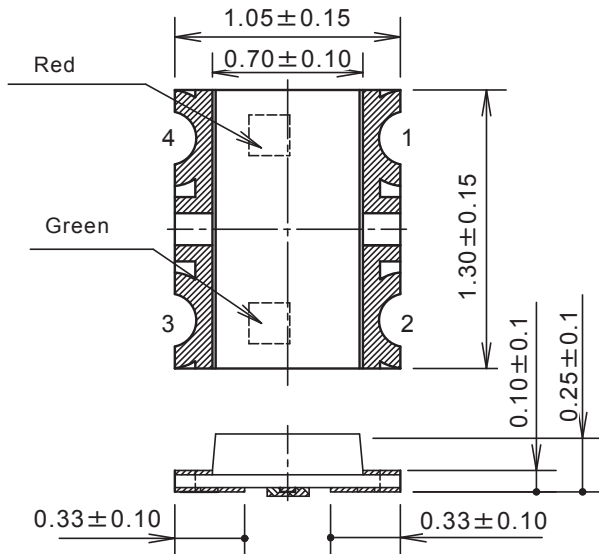
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity *1	$I_O$	$I_F = 5 \text{ mA}$	11.0	15.0	52.0	mcd
Reverse current	$I_R$	$V_R = 4 \text{ V}$			100	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 5 \text{ mA}$		1.95	2.30	V
Peak emission wavelength	$\lambda_p$	$I_F = 5 \text{ mA}$		638		nm
Dominant emission wavelength *2	$\lambda_d$	$I_F = 5 \text{ mA}$	615	628	634	nm
Spectral half band width	$\Delta\lambda$	$I_F = 5 \text{ mA}$		20		nm

Note) \*1: Measurement tolerance:  $\pm 20\%$

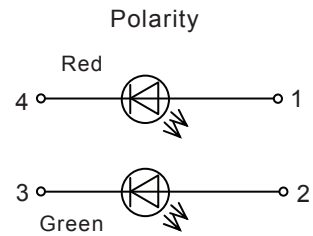
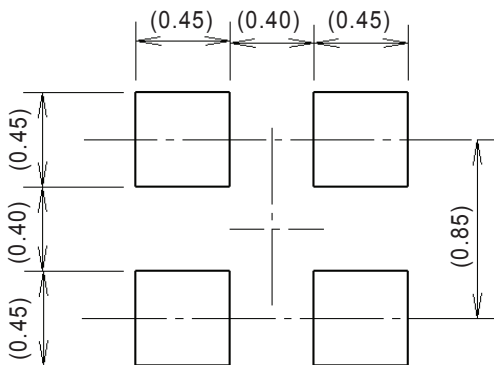
\*2: Measurement tolerance:  $\pm 3 \text{ nm}$



■ Package (Unit: mm)



Recommended Land Layout



- 1. Anode (Red)
- 2. Anode (Green)
- 3. Cathode (Green)
- 4. Cathode (Red)

(Note1) Electrode projection is not included in the package dimensions.

(Note2) About solder thickness, please examine the products yourself completely.

(Recommended thickness :  $t=0.10\text{ mm} \sim 0.15\text{ mm}$ )

(Note3) Do not install the pattern of the printed wiring board under LED.

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