

# LNJ757W86RA

## High Bright Surface Mounting Chip LED

ESS Type

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

- Pure Green

Parameter	Symbol	Rating	Unit
Power dissipation	$P_D$	75	mW
Forward current	$I_F$	20	mA
Pulse forward current *	$I_{FP}$	70	mA
Reverse voltage	$V_R$	5	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

- Pure Green
- Blue
- Red

- Blue

Parameter	Symbol	Rating	Unit
Power dissipation	$P_D$	75	mW
Forward current	$I_F$	20	mA
Pulse forward current *	$I_{FP}$	70	mA
Reverse voltage	$V_R$	5	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.

- 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  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

• Pure Green

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity <sup>*1</sup>	$I_O$	$I_F = 5 \text{ mA}$	20	90	180	mcd
Forward current	$I_R$	$V_R = 5 \text{ V}$			100	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 5 \text{ mA}$		3.0	3.3	V
Peak emission wavelength	$\lambda_P$	$I_F = 5 \text{ mA}$		520		nm
Dominant emission wavelength <sup>*2</sup>	$\lambda_d$	$I_F = 5 \text{ mA}$	518	525	533	nm
Spectral half band width	$\Delta\lambda$	$I_F = 5 \text{ mA}$		40		nm

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

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

• Blue

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity <sup>*1</sup>	$I_O$	$I_F = 5 \text{ mA}$	7	15	25	mcd
Reverse current	$I_R$	$V_R = 5 \text{ V}$			100	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 5 \text{ mA}$		2.95	3.30	V
Peak emission wavelength	$\lambda_P$	$I_F = 5 \text{ mA}$		462		nm
Dominant emission wavelength <sup>*2</sup>	$\lambda_d$	$I_F = 5 \text{ mA}$	465	470	474	nm
Spectral half band width	$\Delta\lambda$	$I_F = 5 \text{ mA}$		30		nm

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

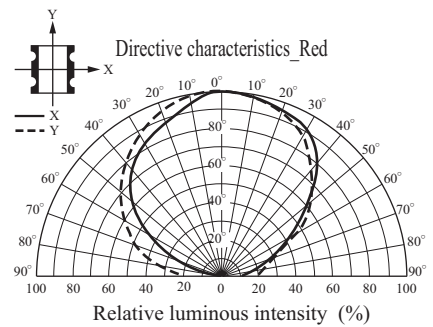
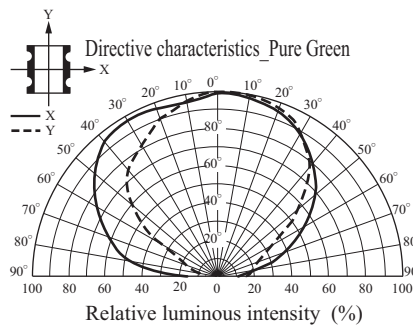
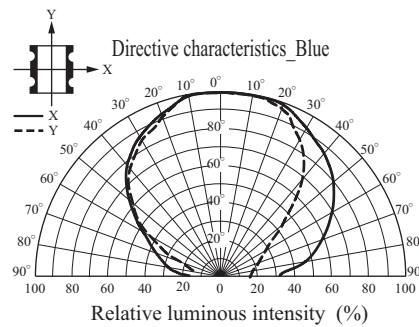
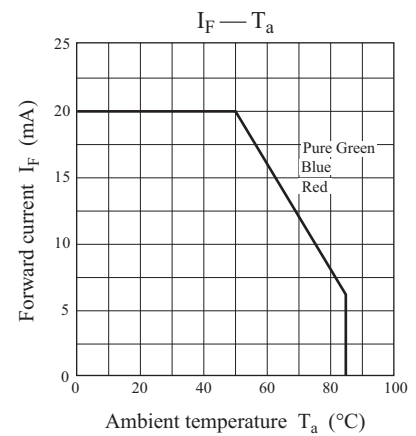
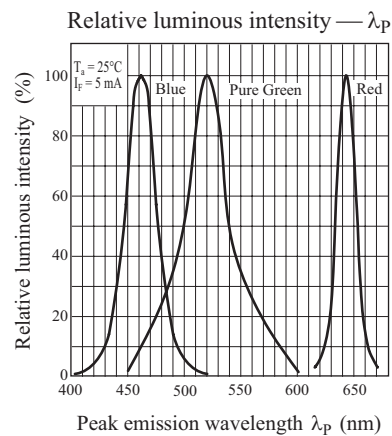
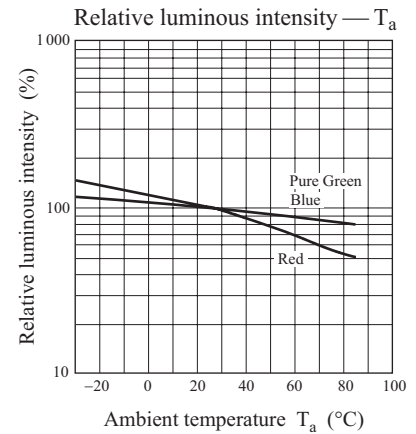
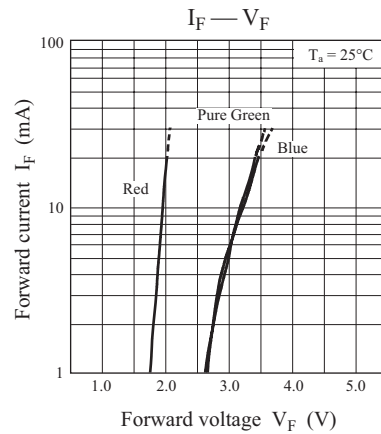
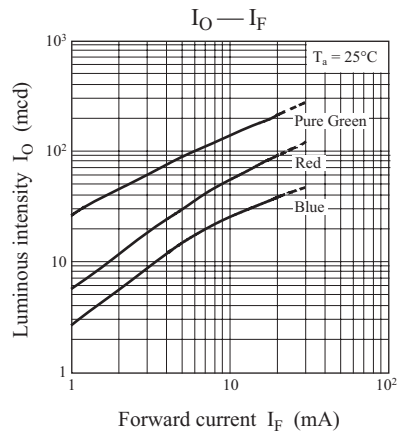
\*2: Measurement tolerance:  $\pm 3 \text{ nm}$

• Red

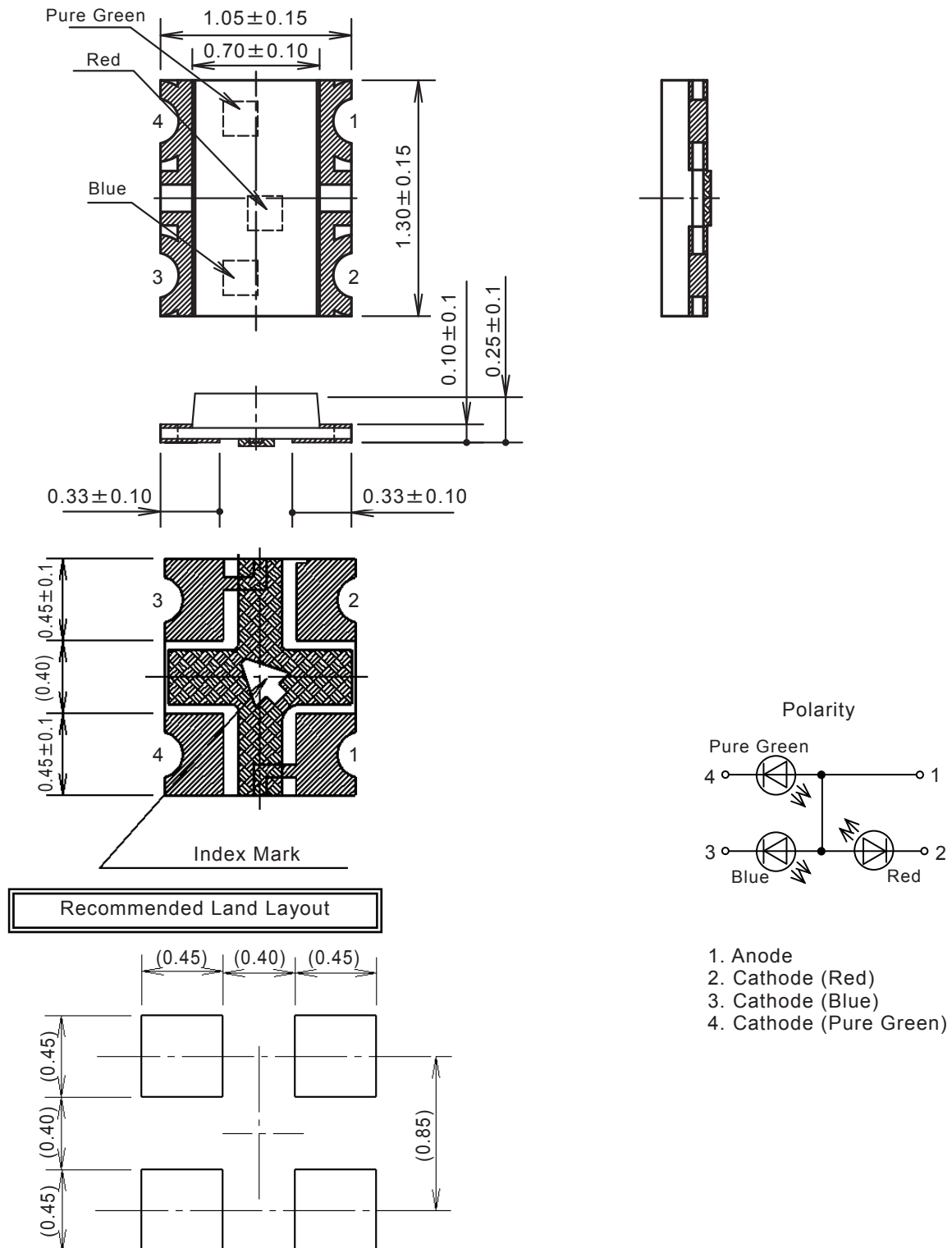
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity <sup>*1</sup>	$I_O$	$I_F = 5 \text{ mA}$	15	30	45	mcd
Reverse current	$I_R$	$V_R = 4 \text{ V}$			100	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 5 \text{ mA}$		1.9	2.3	V
Peak emission wavelength	$\lambda_P$	$I_F = 5 \text{ mA}$		643		nm
Dominant emission wavelength <sup>*2</sup>	$\lambda_d$	$I_F = 5 \text{ mA}$	621	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)



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

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

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

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

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