

LNJ167W85RA

Surface Mounting Chip LED

ESS Type

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

- 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.

■ Lighting Color

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

- Blue

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity *1	I_O	$I_F = 5 \text{ mA}$	5	15	25	mcad
Forward current	I_R	$V_R = 5 \text{ V}$			100	μA
Forward voltage	V_F	$I_F = 5 \text{ mA}$		2.95	3.3	V
Peak emission wavelength	λ_p	$I_F = 5 \text{ mA}$		462		nm
Dominant emission wavelength *2	λ_d	$I_F = 5 \text{ mA}$	465	470	475	nm
Spectral half band width	$\Delta\lambda$	$I_F = 5 \text{ mA}$		30		nm

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

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

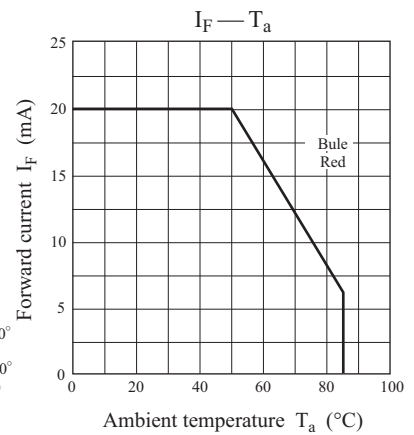
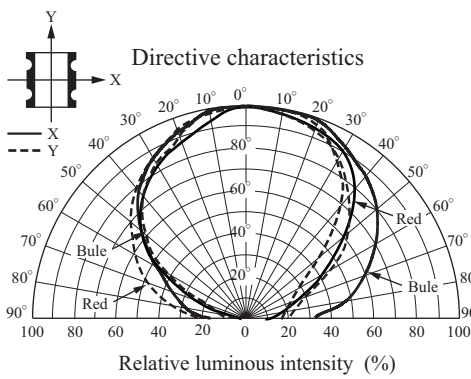
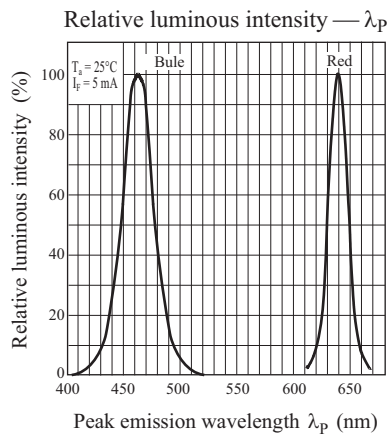
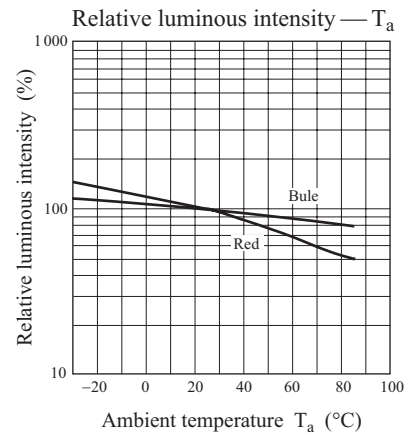
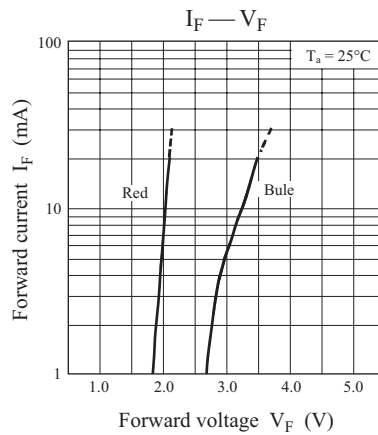
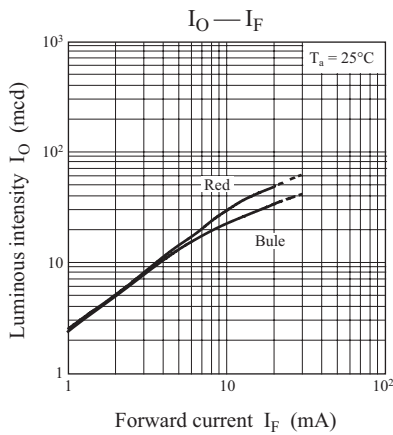
■ Electro-Optical Characteristics (Continued) $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

• Red

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity *1	I_O	$I_F = 5 \text{ mA}$	11	15	52	mcd
Reverse current	I_R	$V_R = 4 \text{ V}$			100	μA
Forward voltage	V_F	$I_F = 5 \text{ mA}$		1.95	2.3	V
Peak emission wavelength	λ_p	$I_F = 5 \text{ mA}$		638		nm
Dominant emission wavelength *2	λ_d	$I_F = 5 \text{ mA}$	615	628	634	nm
Spectral half band width	$\Delta\lambda$	$I_F = 5 \text{ mA}$		20		nm

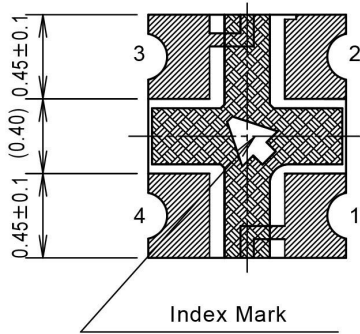
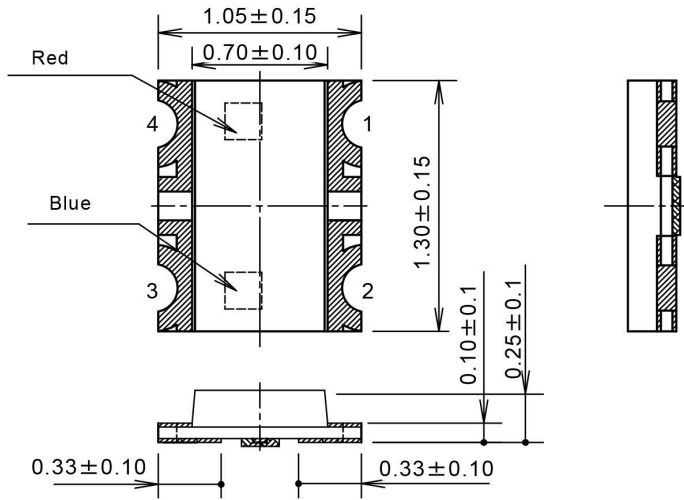
Note) *1: Measurement tolerance: $\pm 20\%$

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



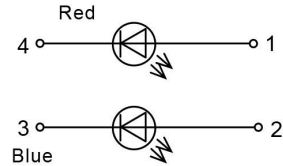
■ Package (Unit: mm)

Unit:mm

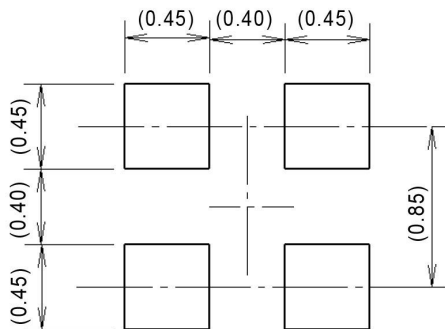


Item	Contents
Terminal Material	The Cu System
Terminal Process	Cu + Ni + Au Plate
Mold Material	Epoxy Resin
Print Board Material	BT Resin

Polarity



Reference Land Layout



- 1. Anode (Red)
- 2. Anode (Blue)
- 3. Cathode (Blue)
- 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 mm~0.15 mm)

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

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