# LNJ167W85RA

# Surface Mounting Chip LED

## ESS Type

# ■ Absolute Maximum Ratings $T_a = 25$ °C

#### • Blue

Parameter	Symbol	Rating	Unit	
Power dissipation	$P_{\mathrm{D}}$	75	mW	
Forward current	$I_{\mathrm{F}}$	20	mA	
Pulse forward current *	$I_{FP}$	70	mA	
Reverse voltage	V <sub>R</sub>	5	V	
Operating ambient temperature	T <sub>opr</sub>	-30 to +85	°C	
Storage temperature	T <sub>stg</sub>	-40 to +100	°C	

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

#### • Red

Parameter	Symbol	Rating	Unit	
Power dissipation	P <sub>D</sub>	55	mW	
Forward current	$I_{\rm F}$	20	mA	
Pulse forward current *	$I_{FP}$	60	mA	
Reverse voltage	V <sub>R</sub>	4	V	
Operating ambient temperature	T <sub>opr</sub>	-30 to +85	°C .	
Storage temperature	T <sub>stg</sub>	-40 to +100	°C	

Note) \*: The condition of I<sub>FP</sub> is duty 10%, Pulse width 1 msec.

## ■ Electro-Optical Characteristics $T_a = 25$ °C±3°C

#### • Blue

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Luminous intensity *1	Io	$I_F = 5 \text{ mA}$	5	15	25	mcd
Forward current	$I_R$	$V_R = 5 V$			100	μΑ
Forward voltage	$V_{\mathrm{F}}$	$I_F = 5 \text{ mA}$		2.95	3.3	V
Peak emission wavelength	$\lambda_{ m P}$	$I_F = 5 \text{ mA}$		462		nm
Dominant emission wavelength *2	$\lambda_{\mathrm{d}}$	$I_F = 5 \text{ mA}$	465	470	475	nm
Spectral half band width	Δλ	$I_F = 5 \text{ mA}$		30		nm

Note) \*1: Measurement tolerance: ±20% \*2: Measurement tolerance: ±3 nm

## ■ Lighting Color

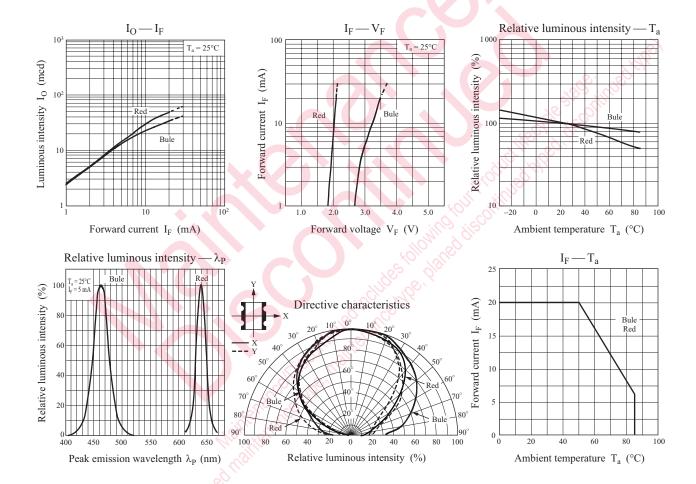
- Blue
- Red

## ■ Electro-Optical Characteristics (Continued) $T_a = 25$ °C±3°C

#### • Red

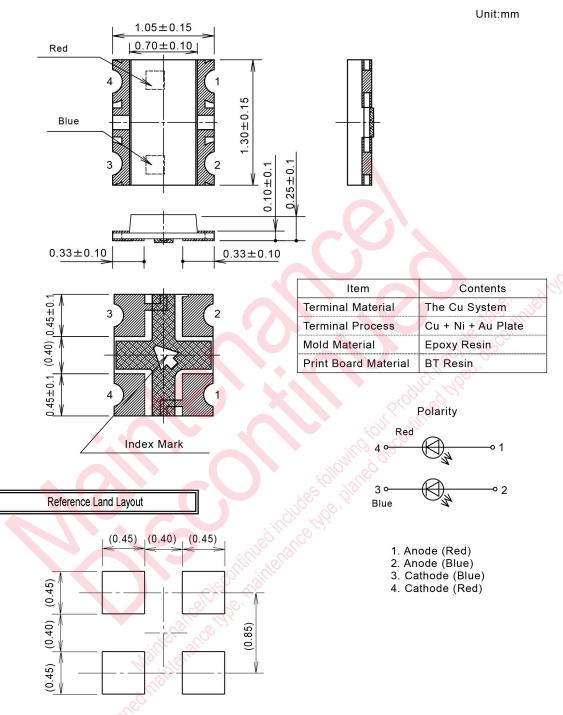
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Luminous intensity *1	I <sub>O</sub>	$I_F = 5 \text{ mA}$	11	15	52	mcd
Reverse current	$I_R$	$V_R = 4 V$			100	μΑ
Forward voltage	$V_{\mathrm{F}}$	$I_F = 5 \text{ mA}$		1.95	2.3	V
Peak emission wavelength	$\lambda_{ m P}$	$I_F = 5 \text{ mA}$		638		nm
Dominant emission wavelength *2	$\lambda_{\mathrm{d}}$	$I_F = 5 \text{ mA}$	615	628	634	nm
Spectral half band width	Δλ	$I_F = 5 \text{ mA}$		20		nm

Note) \*1: Measurement tolerance: ±20% \*2: Measurement tolerance: ±3 nm



Ver. AEK 2

#### ■ 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~0.15 mm)

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

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