LNJ167W87RA

Surface Mounting Chip LED

ESS Type

■ Lighting Color

- Pure Green
- Red

■ Absolute Maximum Ratings T_a = 25°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	°C
Storage temperature	T_{stg}	–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_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	°C
Storage temperature	T_{stg}	–40 to +100	°C

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

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

- Pure Green

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity *1	I_O	I_F = 5 mA	18.0	90.0	180.0	mcd
Forward current	I_R	V_R = 5 V			100	μA
Forward voltage	V_F	I_F = 5 mA		3.0	3.3	V
Peak emission wavelength	λ_P	I_F = 5 mA		520		nm
Dominant emission wavelength *2	λ_d	I_F = 5 mA	518	525	533	nm
Spectral half band width	$\Delta\lambda$	I_F = 5 mA		40		nm

Note) *1: Measurement tolerance: ±20%

*2: Measurement tolerance: ±3 nm

■ Electro-Optical Characteristics (Continued) $T_a = 25°C \pm 3°C$

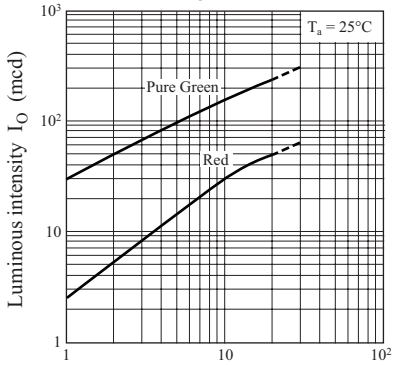
• Red

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

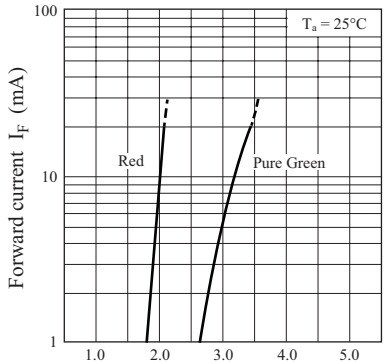
Note) *1: Measurement tolerance: ±20%

*2: Measurement tolerance: ±3 nm

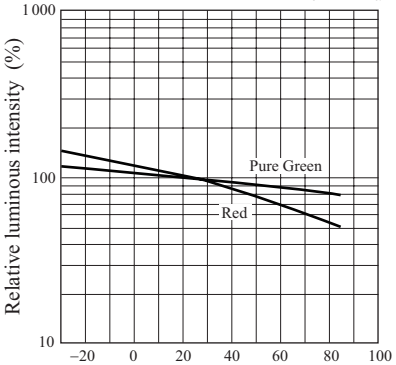
I_O — I_F



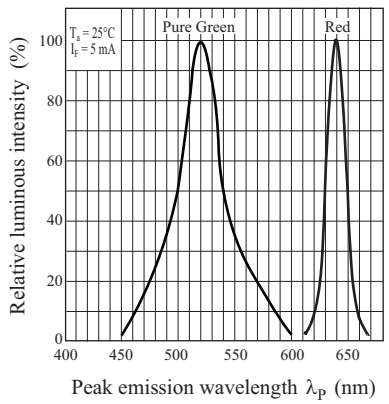
I_F — V_F



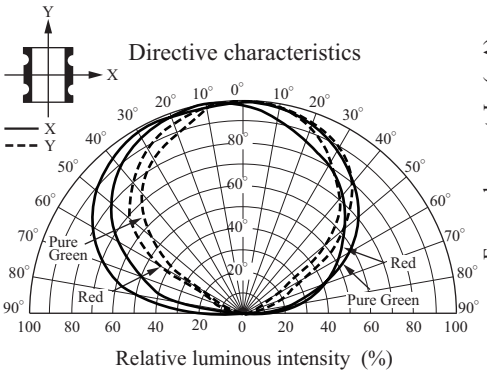
Relative luminous intensity — T_a



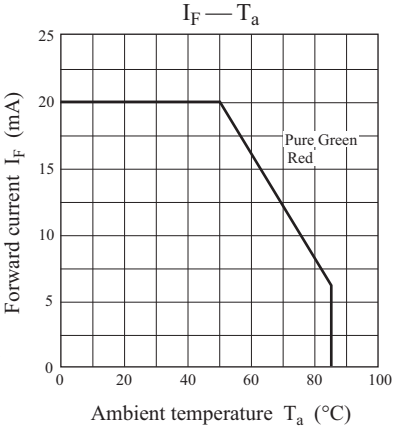
Relative luminous intensity — λ_P



Directive characteristics

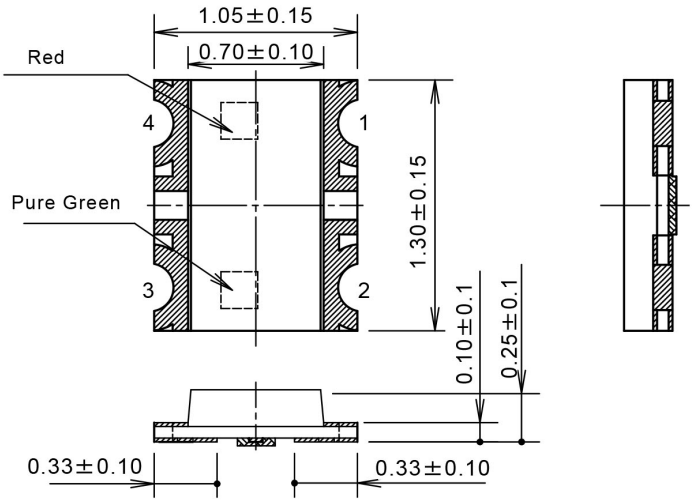


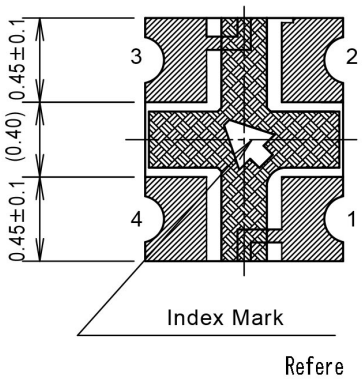
I_F — T_a



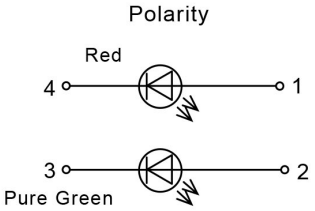
■ Package (Unit: mm)

Unit:mm

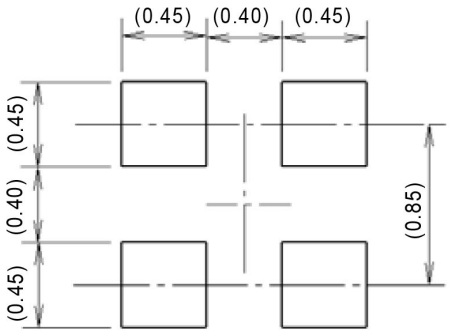




Item	Contents
Terminal Material	The Cu System
Terminal Process	Cu + Ni + Au Plate
Mold Material	Epoxy Resin
Print Board Material	BT Resin



Reference Land Layout



1. Anode (Red)
2. Anode (Pure Green)
3. Cathode (Pure 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 mm～0.15 mm)
(Note3)Do not install the pattern of the printed wiring board under LED.

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