LNJ727W83RAS

Surface Mounting Chip LED

USS-3 Type

■ Absolute Maximum Ratings T_a = 25°C

• Pure Green

Parameter	Symbol	Rating	Unit
Power dissipation	P_D	65	mW
Forward current	I_F	15	mA
Pulse forward current *	I_{FP}	50	mA
Reverse direct current	I_{RDC}	100	mA
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.

• Orange

Parameter	Symbol	Rating	Unit
Power dissipation	P_D	70	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.

• Blue

Parameter	Symbol	Rating	Unit
Power dissipation	P_D	65	mW
Forward current	I_F	15	mA
Pulse forward current *	I_{FP}	50	mA
Reverse direct current	I_{RDC}	100	mA
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.

■ Lighting Color

• Pure Green
• Orange
• Blue

■ Electro-Optical Characteristics T_a = 25°C

• Pure Green

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity *1	I_O	I_F = 5 mA	30	60	120	mcd
Forward voltage	V_F	I_F = 5 mA		3.1	3.8	V
Peak emission wavelength	λ_P	I_F = 5 mA		525		nm
Dominant emission wavelength *2	λ_d	I_F = 5 mA				
Spectral half band width	$\Delta\lambda$	I_F = 5 mA		45		nm

Note) *1: Measurement tolerance: ±15%
*2: Measurement tolerance: ±3 nm

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

• Orange

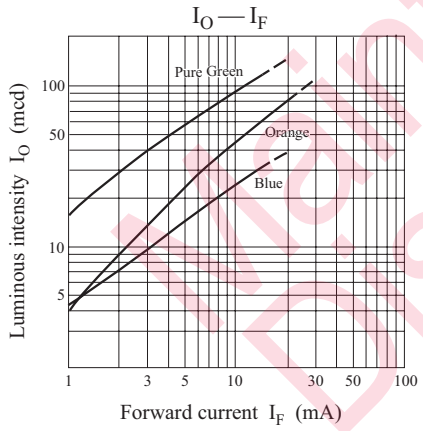
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity *1	I_O	$I_F = 10$ mA	20	45	80	mcd
Reverse current	I_R	$V_R = 4$ V			100	μA
Forward voltage	V_F	$I_F = 10$ mA		2.0	2.5	V
Peak emission wavelength	λ_P	$I_F = 10$ mA		630		nm
Dominant emission wavelength *2	λ_d	$I_F = 10$ mA	610	620	630	nm
Spectral half band width	$\Delta\lambda$	$I_F = 10$ mA		15		nm

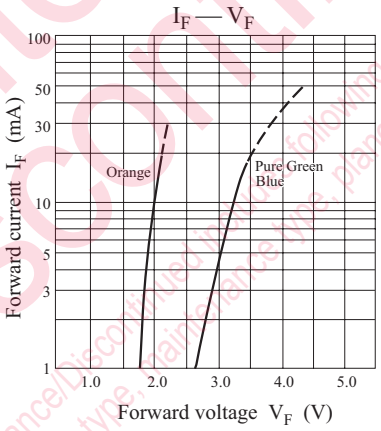
Note) *1: Measurement tolerance: ±15%
*2: Measurement tolerance: ±3 nm

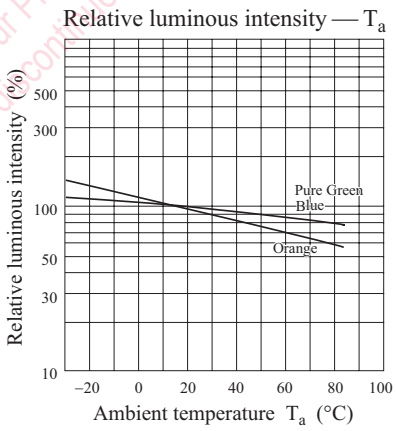
• Blue

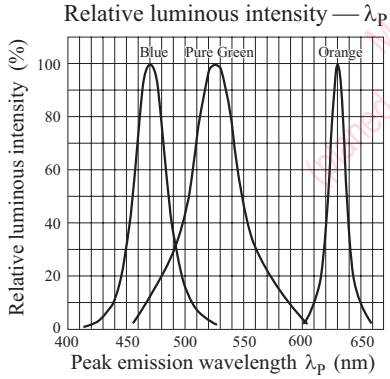
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity *1	I_O	$I_F = 5$ mA	5	15	35	mcd
Forward voltage	V_F	$I_F = 5$ mA		3.1	3.8	V
Peak emission wavelength	λ_P	$I_F = 5$ mA		470		nm
Dominant emission wavelength *2	λ_d	$I_F = 5$ mA	465	472	480	nm
Spectral half band width	$\Delta\lambda$	$I_F = 5$ mA		30		nm

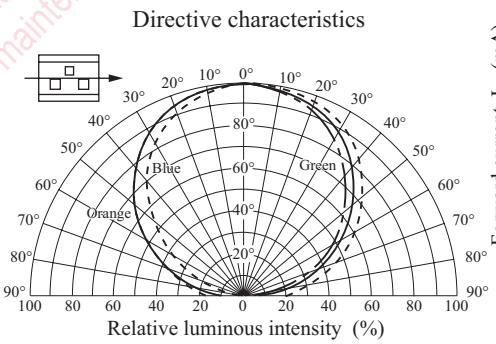
Note) *1: Measurement tolerance: ±15%
*2: Measurement tolerance: ±3 nm

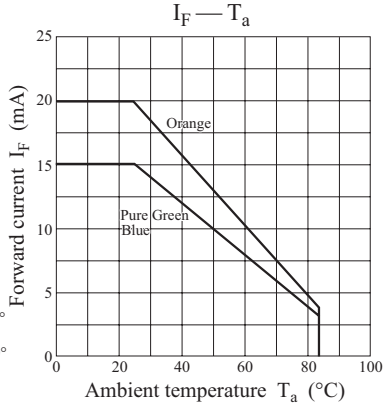












■ Package (Unit: mm)

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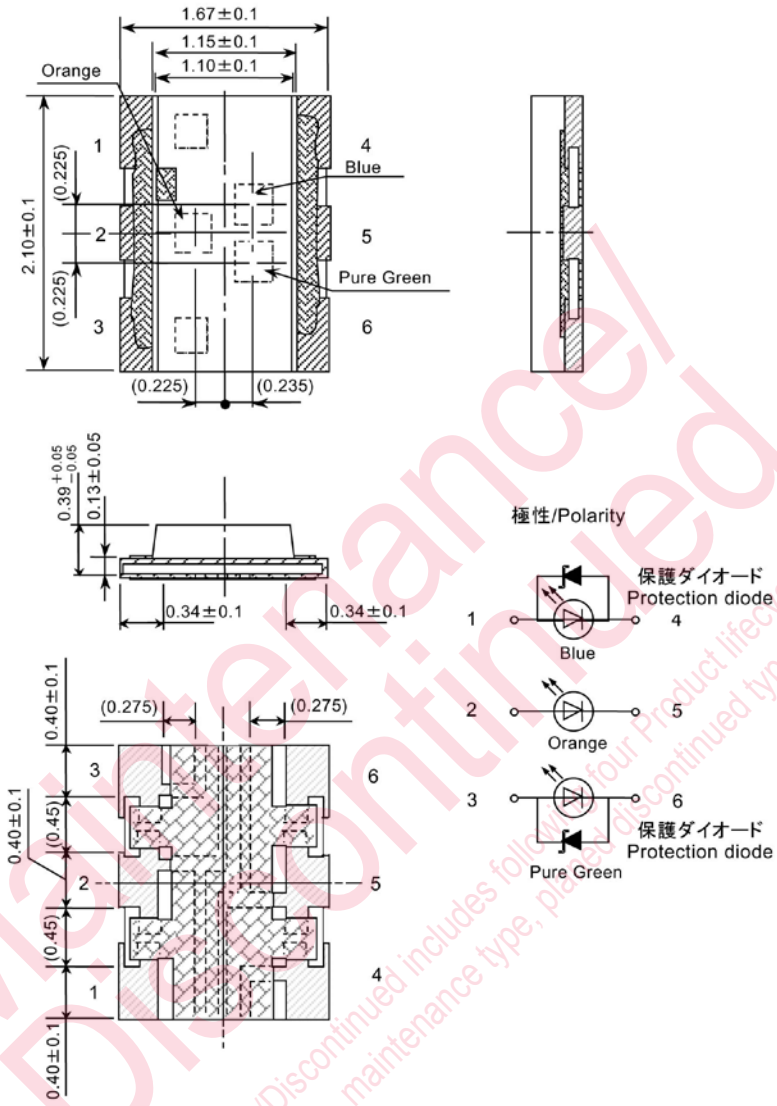

- Pin name
  1, 2, 3: Anode
  4, 5, 6: Cathode

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