

LNJ853W83RA

High Bright Surface Mounting Chip LED

SV (Side View) -0.5 Type

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

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.

■ Lighting Color

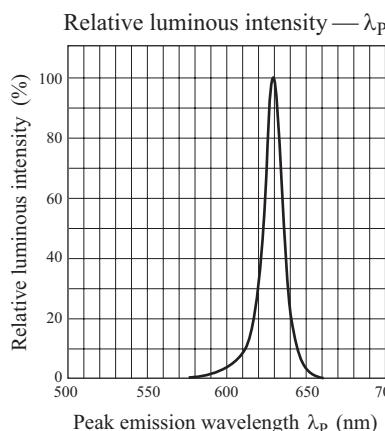
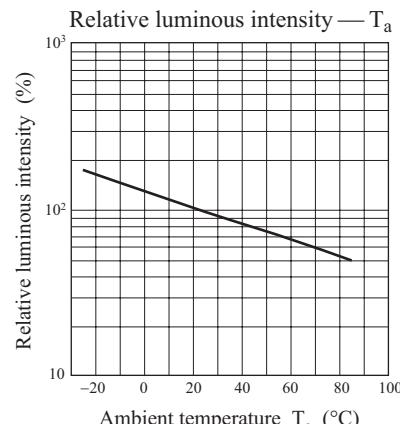
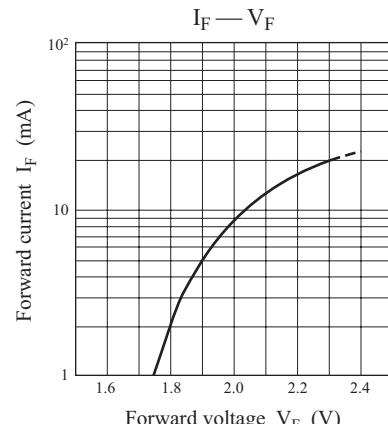
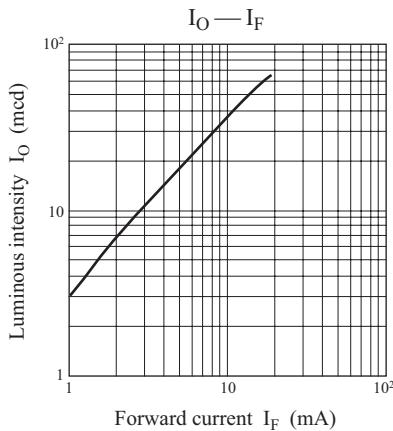
- Orange

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

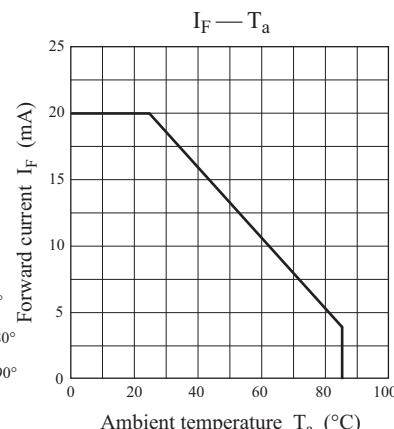
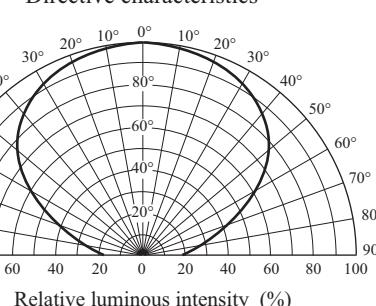
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Luminous intensity *1	I_O	$I_F = 5\text{ mA}$	9.0	17.0	52.5	mcd
Reverse current	I_R	$V_R = 4\text{ V}$			100	μA
Forward voltage	V_F	$I_F = 5\text{ mA}$		1.9	2.3	V
Peak emission wavelength	λ_P	$I_F = 5\text{ mA}$		630		nm
Dominant emission wavelength *2	λ_d	$I_F = 5\text{ mA}$	615	620	627	nm
Spectral half band width	$\Delta\lambda$	$I_F = 5\text{ mA}$		13		nm

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

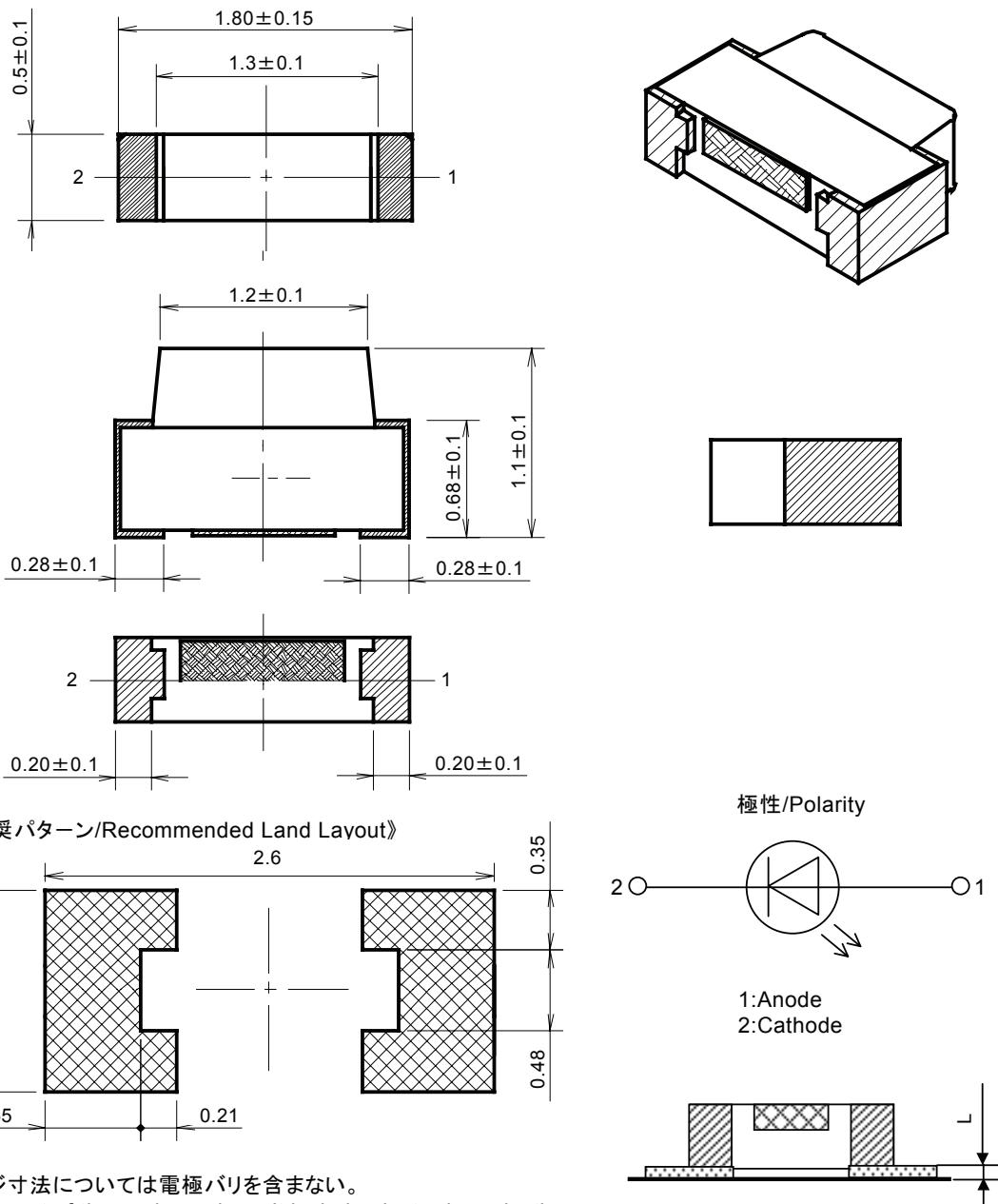
*2: Measurement tolerance: $\pm 3\text{ nm}$



Directive characteristics



■ Package (Unit: mm)



注記/Notes

- パッケージ寸法については電極バリを含まない。
Measurement of the package doesn't include electrode projection.
- 当製品は工法上、はんだ付け面端子端部にメッキバリカエリが発生することや、製品背面に端子を有する縦型面実装タイプである為、リフローはんだ付けの際に不濡れ等が懸念されます。従いまして、はんだの種類の検討ならびに各パットに対し、適正なはんだ量を考慮してください。
Precaution to soldering
Assembly conditions such like mechanical load in placing LED and also suitable volume and type of solder paste has to be fully investigated.
Insufficient soldering may occur because of the condition of solder terminal surface which is caused by its unique production process.
- 基本的にLED直下範囲には固定フットパターン厚み(L)以上のシルク印刷をしないでください。
Please do not print silk more than fixture foot pattern thickness (L) basically within the range right under the LED.

Request for your special attention and precautions in using the technical information and semiconductors described in this book

- (1) If any of the products or technical information described in this book is to be exported or provided to non-residents, the laws and regulations of the exporting country, especially, those with regard to security export control, must be observed.
- (2) The technical information described in this book is intended only to show the main characteristics and application circuit examples of the products. No license is granted in and to any intellectual property right or other right owned by Panasonic Corporation or any other company. Therefore, no responsibility is assumed by our company as to the infringement upon any such right owned by any other company which may arise as a result of the use of technical information described in this book.
- (3) The products described in this book are intended to be used for general applications (such as office equipment, communications equipment, measuring instruments and household appliances), or for specific applications as expressly stated in this book. Consult our sales staff in advance for information on the following applications:
 - Special applications (such as for airplanes, aerospace, automotive equipment, traffic signaling equipment, combustion equipment, life support systems and safety devices) in which exceptional quality and reliability are required, or if the failure or malfunction of the products may directly jeopardize life or harm the human body.It is to be understood that our company shall not be held responsible for any damage incurred as a result of or in connection with your using the products described in this book for any special application, unless our company agrees to your using the products in this book for any special application.
- (4) The products and product specifications described in this book are subject to change without notice for modification and/or improvement. At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements.
- (5) When designing your equipment, comply with the range of absolute maximum rating and the guaranteed operating conditions (operating power supply voltage and operating environment etc.). Especially, please be careful not to exceed the range of absolute maximum rating on the transient state, such as power-on, power-off and mode-switching. Otherwise, we will not be liable for any defect which may arise later in your equipment. Even when the products are used within the guaranteed values, take into the consideration of incidence of break down and failure mode, possible to occur to semiconductor products. Measures on the systems such as redundant design, arresting the spread of fire or preventing glitch are recommended in order to prevent physical injury, fire, social damages, for example, by using the products.
- (6) Comply with the instructions for use in order to prevent breakdown and characteristics change due to external factors (ESD, EOS, thermal stress and mechanical stress) at the time of handling, mounting or at customer's process. When using products for which damp-proof packing is required, satisfy the conditions, such as shelf life and the elapsed time since first opening the packages.
- (7) This book may be not reprinted or reproduced whether wholly or partially, without the prior written permission of our company.

No.020210