

Approved	Checked	Designed	DEVELOPMENT SPECIFICATION Tentative P/N:LNJ212R82RA				
		<i>K. Sakai</i>					

T Y P E	Red Light Emitting Diode						
APPLICATION	Indicators						
MATERIAL	InGaAlP						
OUTLINE	Attached						
ABSOLUTE MAXIMUM RATINGS	P	*I _{FP}	I _{FDC}	V _R	Topr	Tstg	
	55	60	20	4	-30~+85	-40~+100	
	mW	mA	mA	V	°C	°C	
CONDITION	T _a = 25 ± 3 °C						

Test Specification

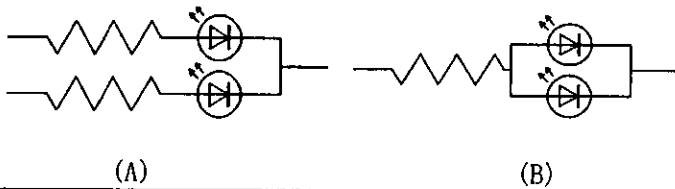
Item	Symbol	Condition	Typ.	Limit		Unit
				Min	Max	
Forward Voltage	V _F	I _F = 10 mA	1.92		2.5	V
Reverse Leakage Current	I _R	V _R = 4 V			100	μA
Luminous Intensity *2	I _O	I _F = 10 mA DC	15	8		mcad
Peak Emission Wavelength	λ _p	I _F = 10 mA DC	645			nm
Spectral Line Half Width	Δλ	I _F = 10 mA DC	22			nm

- *1 · The Condition of I_{FP} is duty 10 % , Pulse width 1 ms
- Please contact the Panasonic local office if you design at low current (below 1 mA DC) or pulse current operation and have any questions.
- *2 Measurement Tolerance is ±20%.

NOTE

- ★1. Terminal:Plated with gold on copper base.
- ★2. Beware of destruction by static electricity in handling the LED.
- ★3. Soldering conditions.
Refer to Handling note.
- ★4. Care should be taken that soldering is done within 7-days after opening the dry package and reel.

★5. Circuit to operate LED.

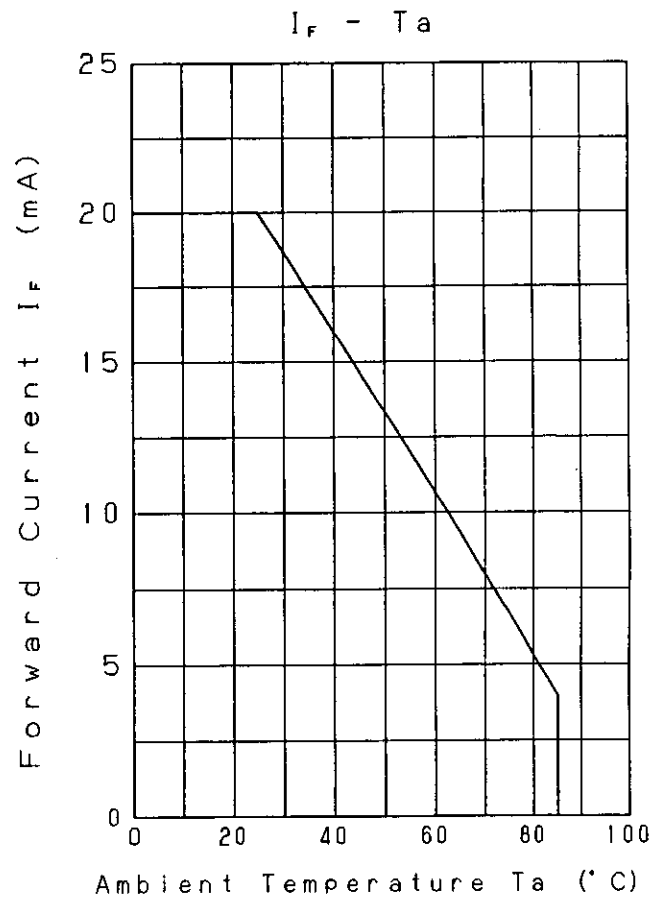
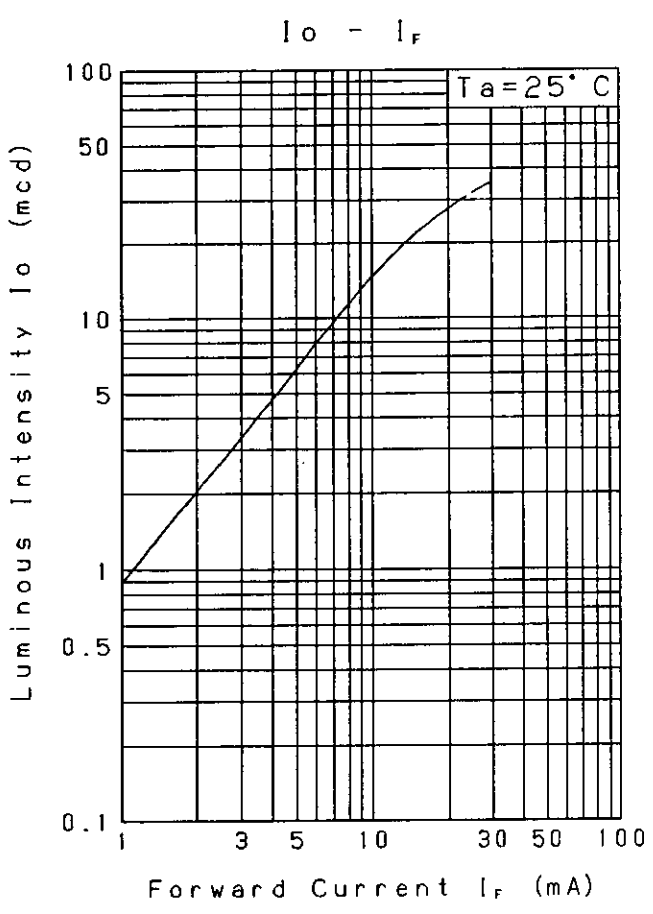
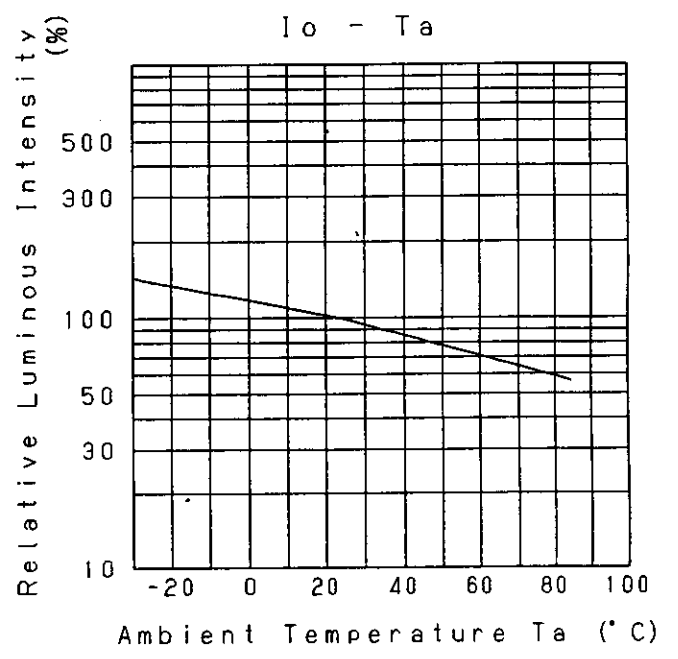
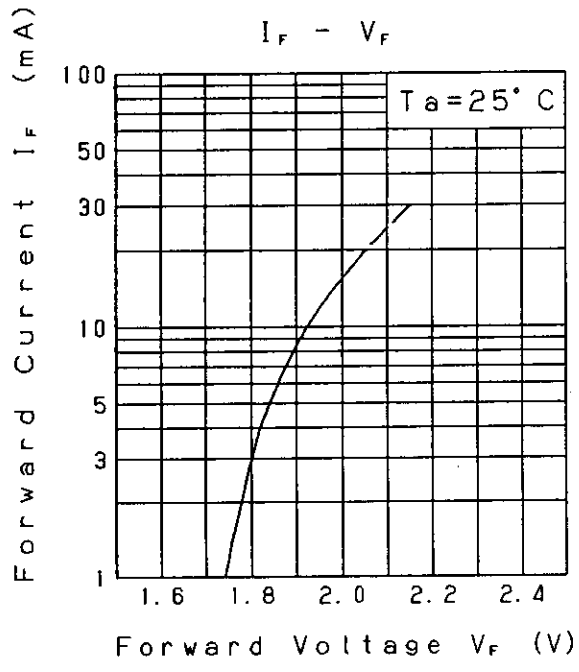


- (A) Recommended circuit.
- (B) The difference of brightness between the LED could be found due to the V_F characteristics of each LED.

Oct. 20. 2001

Approved	Checked	Designed <i>K. Nakahara</i>
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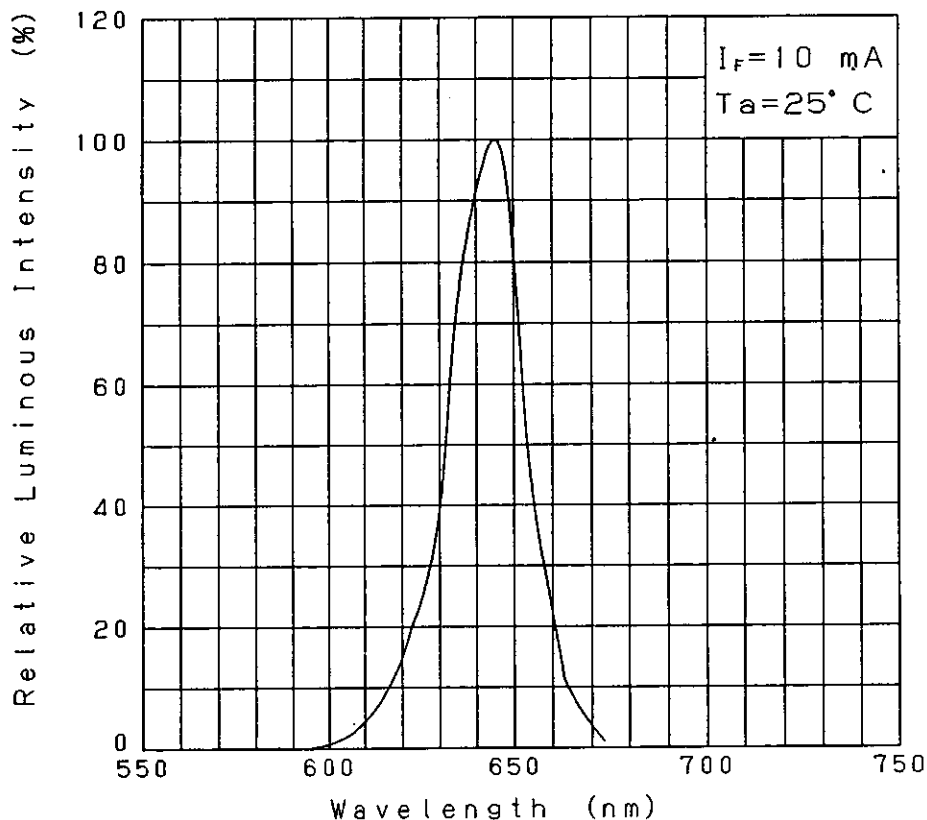
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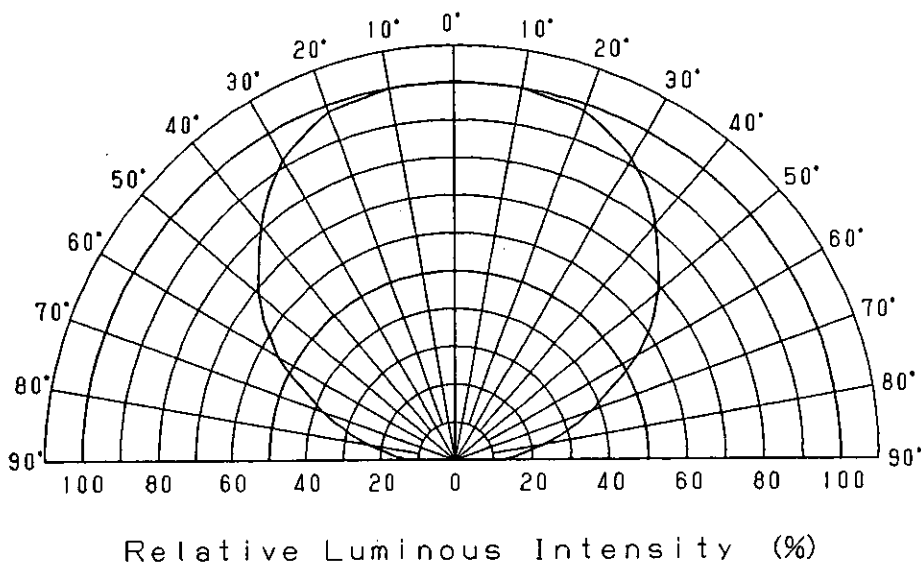
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		<i>K. Adachi</i>				

Relative Luminous Intensity
Wavelength Characteristics

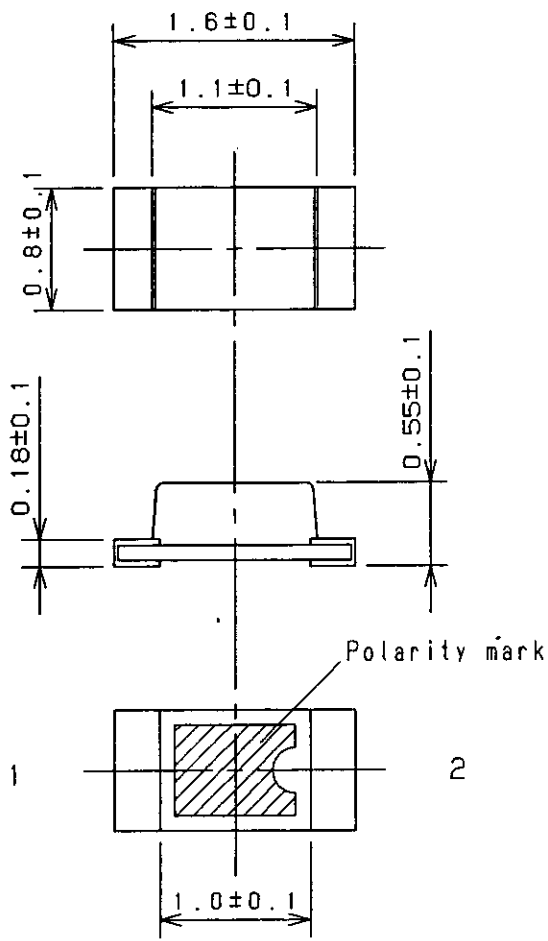


Directive Characteristics

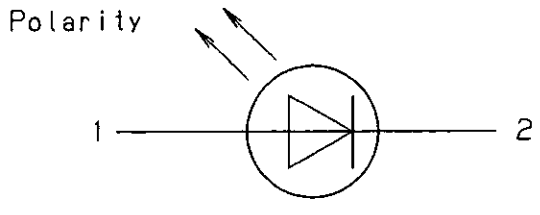
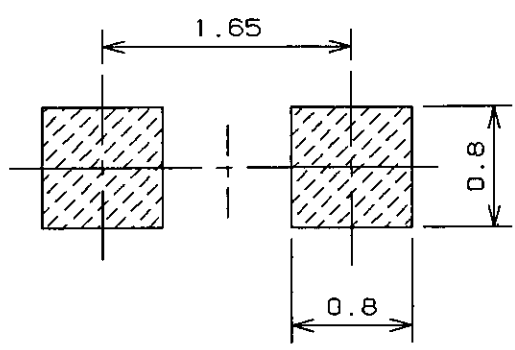


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		<i>A. A. Okamoto</i>				



Recommended Land Layout



1: Anode
 2: Cathode

(NOTE)

- 1. Measurement of the package doesn't include electrode projection.
- 2. Unit; mm

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