

Approved	Checked	Designed	DEVELOPMENT SPECIFICATION				
		<i>K. J. ...</i>		Tentative P/N:LNJ412K84RA			

T Y P E	Amber Light Emitting Diode						
APPLICATION	Indicators						
MATERIAL	InGaAlP						
OUTLINE	Attached						
ABSOLUTE MAXIMUM RATINGS	P	*1 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

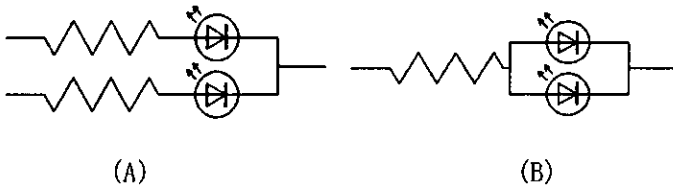
Item	Symbol	Condition	Typ.	Limit		Unit
				Min	Max	
Forward Voltage	V _F	I _F = 10 mA	2.1		2.5	V
Reverse Leakage Current	I _R	V _R = 4 V			100	μA
Luminous Intensity *2	I _O	I _F = 10 mA DC	26	14		mcd
Peak Emission Wavelength	λ _p	I _F = 10 mA DC	595			nm
Spectral Line Half Width	Δλ	I _F = 10 mA DC	15			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

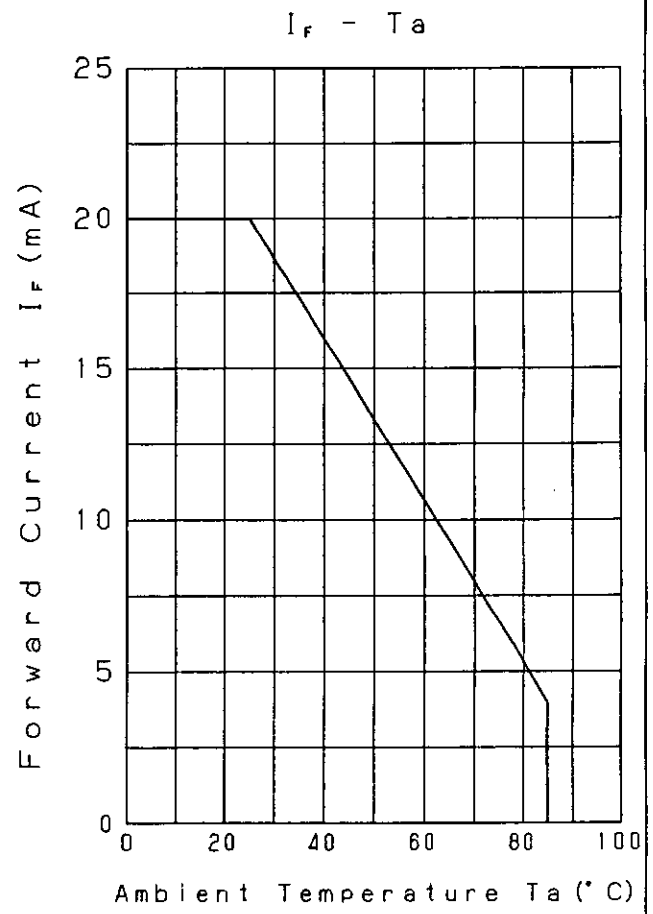
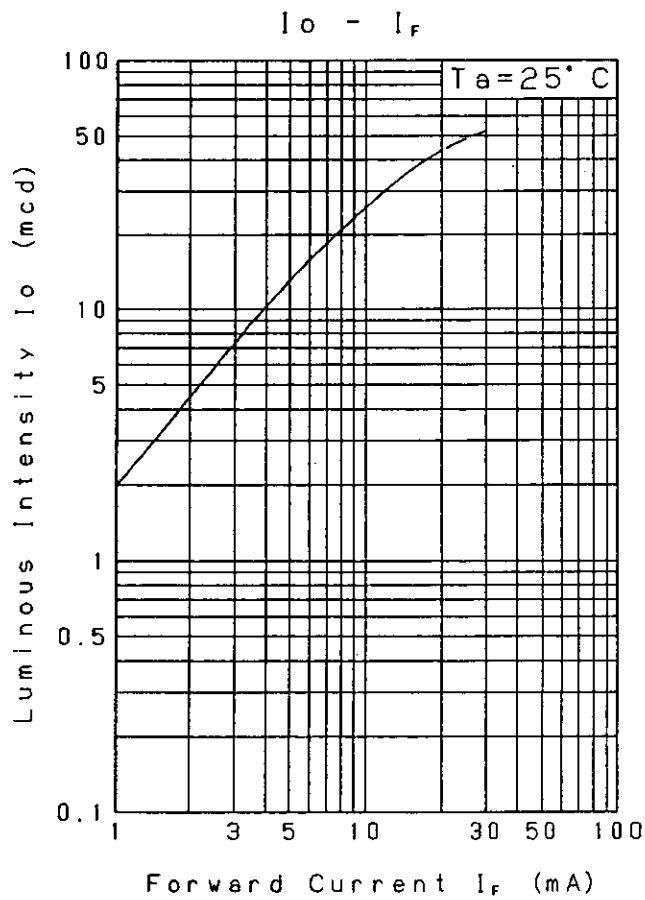
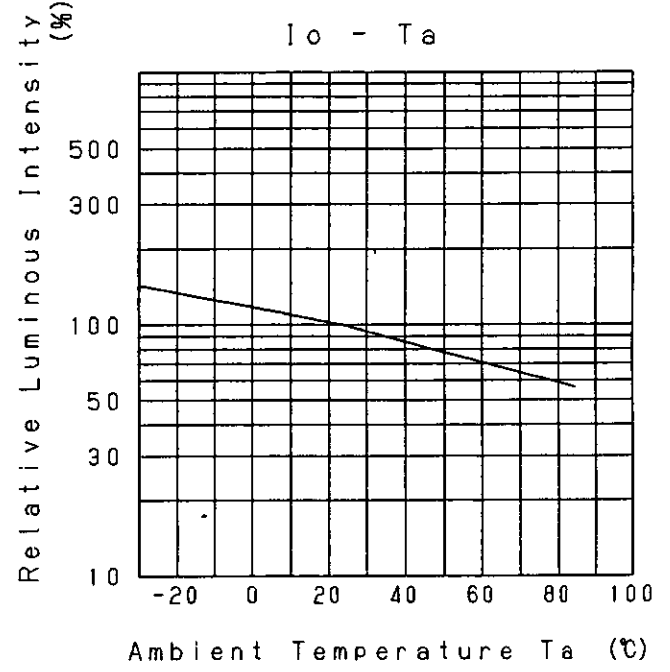
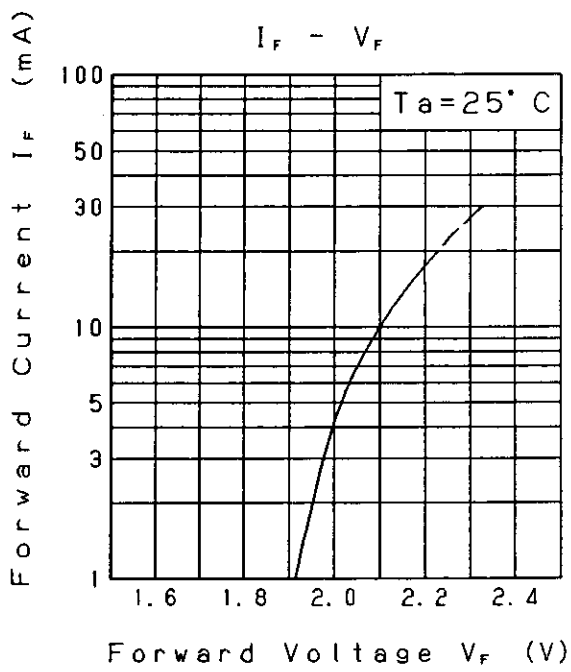
- ★1. Terminal:Plated with gold on copper base.
- ★2. Beware of destruction by static electricity in handling the LED.
- ★3. Soldering conditions.
Refer to Handling note.
- ★4. Care should be taken that soldering is done within 7-days after opening the dry package and reel.

★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.

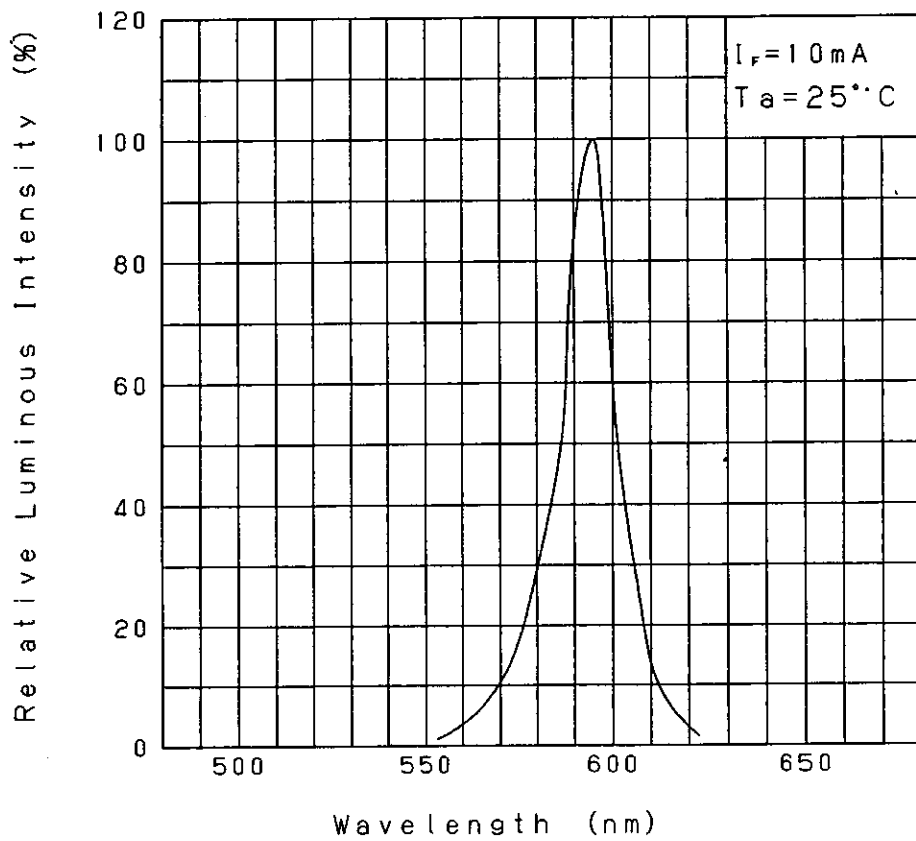
Oct. 20. 2001			



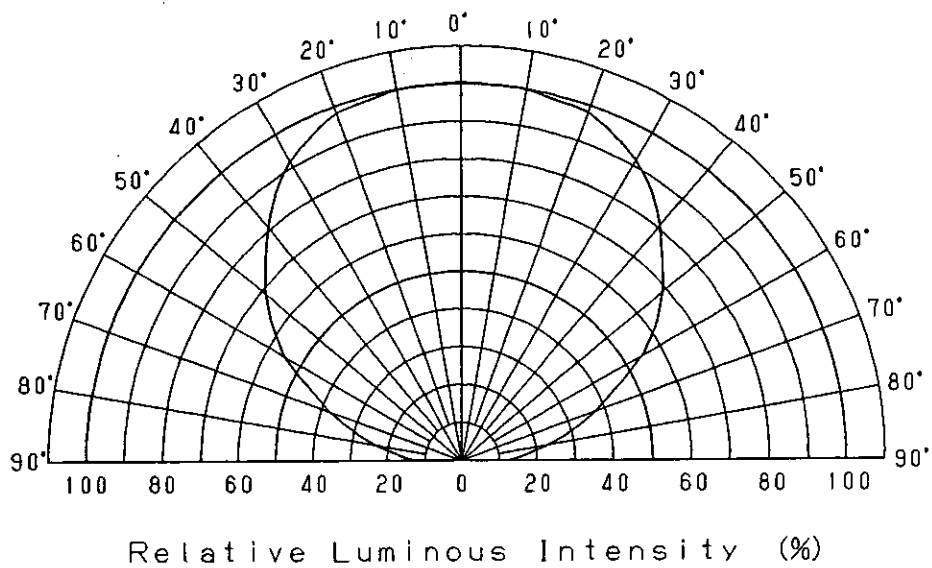
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Relative Luminous Intensity
Wavelength Characteristics



Directive Characteristics

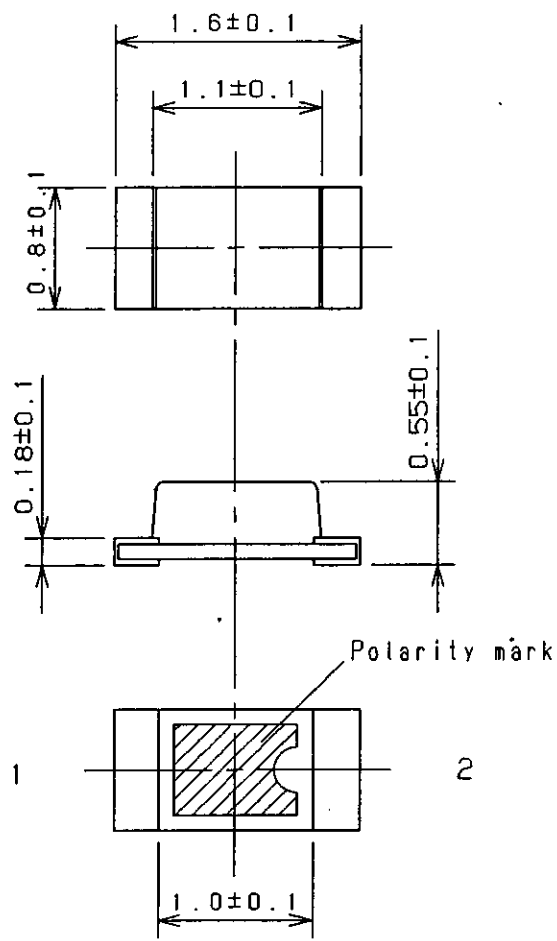


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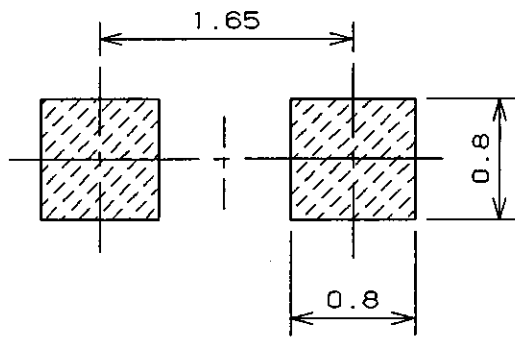
Approved Checked Designed

K. Sakurai

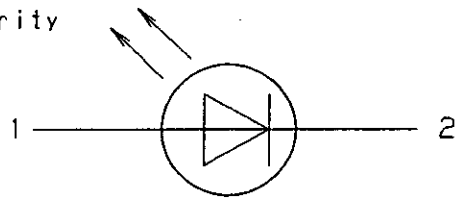
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Recommended Land Layout



Polarity



1: Anode
2: Cathode

(NOTE)

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

Oct.20.2001