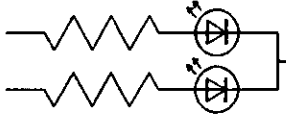
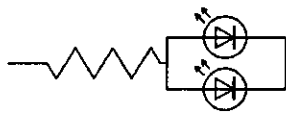
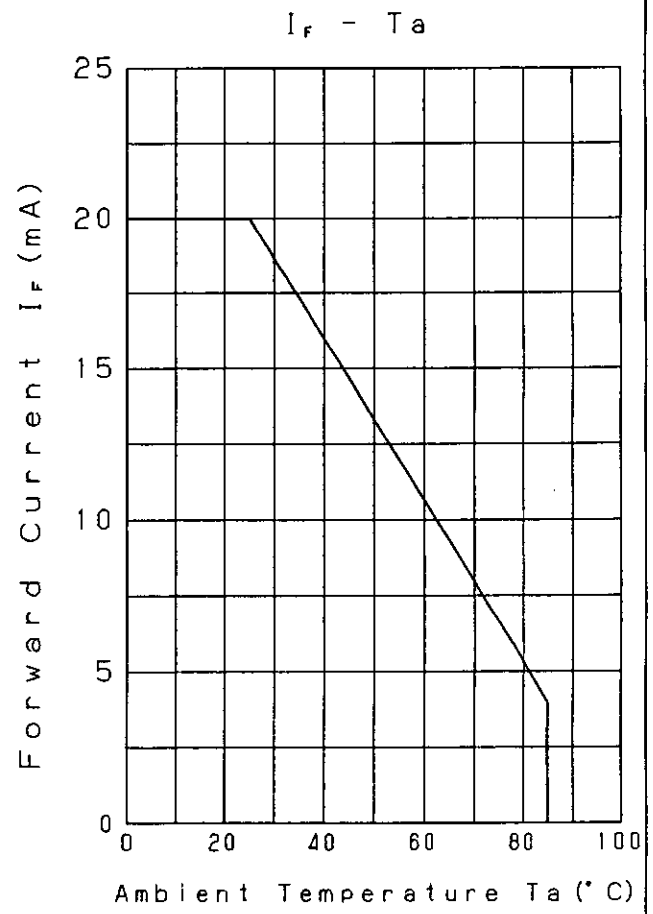
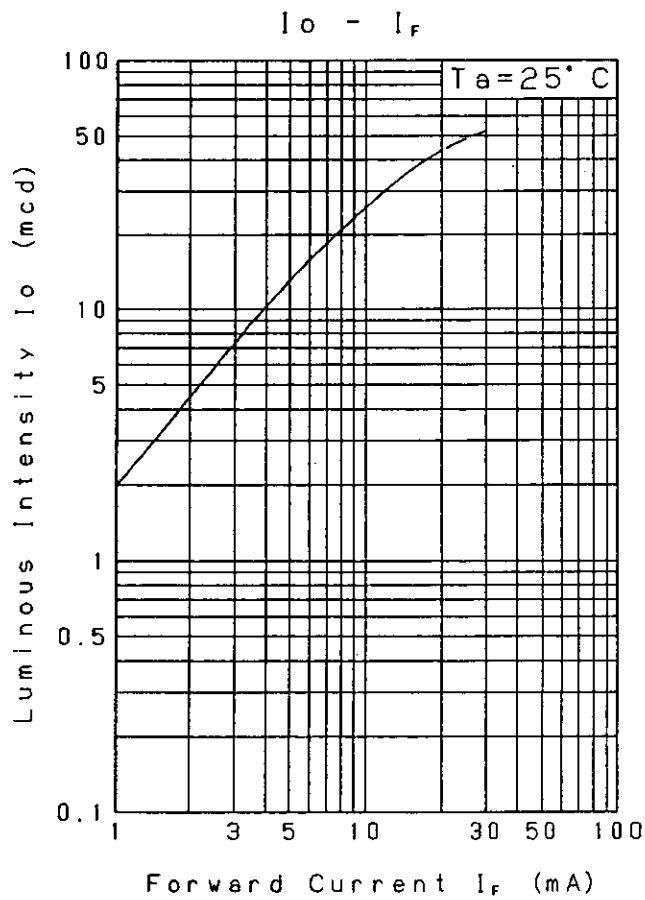
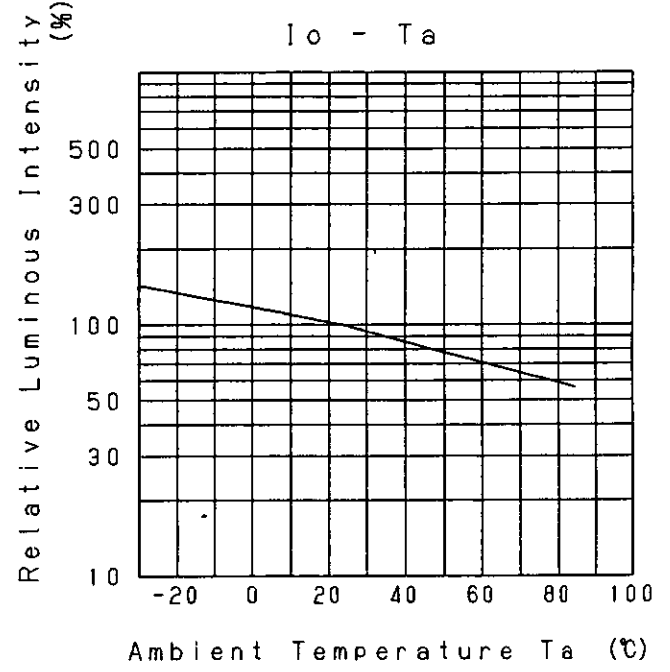
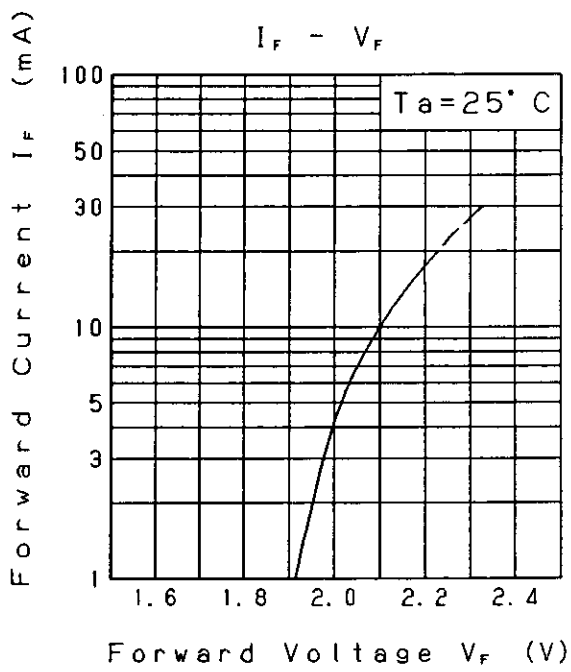


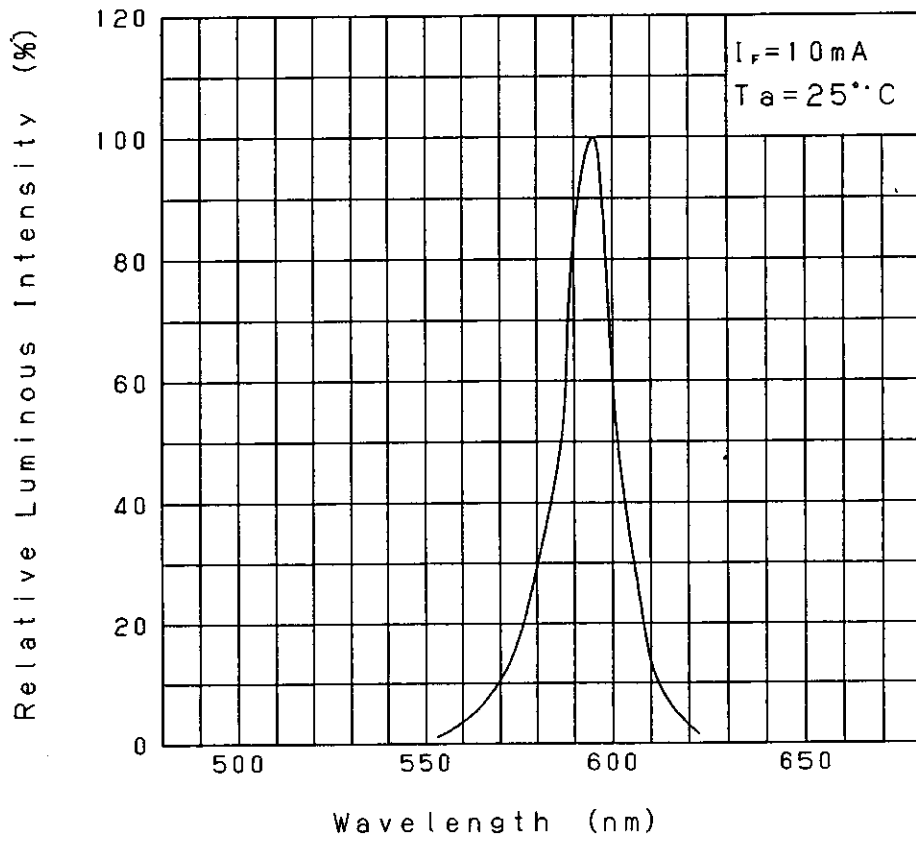
Approved	Checked	Designed	DEVELOPMENT SPECIFICATION					
		<i>K. J. ...</i>	Tentative P/N: <u>LNJ412K84RA</u>					
TYPE			Amber Light Emitting Diode					
APPLICATION			Indicators					
MATERIAL			InGaAlP					
OUTLINE			Attached					
ABSOLUTE MAXIMUM RATINGS			P	*1 I _{FP}	I _{FDC}	V _R	Topr	Tstg
			55	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		
<p>*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.</p> <p>*2 Measurement Tolerance is ±20%.</p>								
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)			(B)			(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								



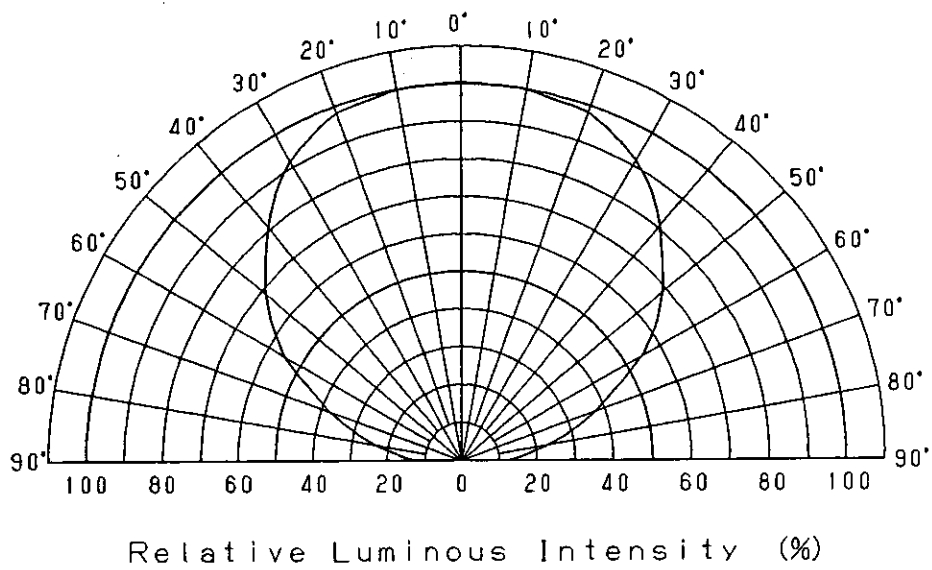
Oct. 20. 2001			
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Approved	Checked	Designed <i>K. J. [Signature]</i>	DEVELOPMENT SPECIFICATION Tentative P/N:LNJ412K84RA	

Relative Luminous Intensity
Wavelength Characteristics



Directive Characteristics

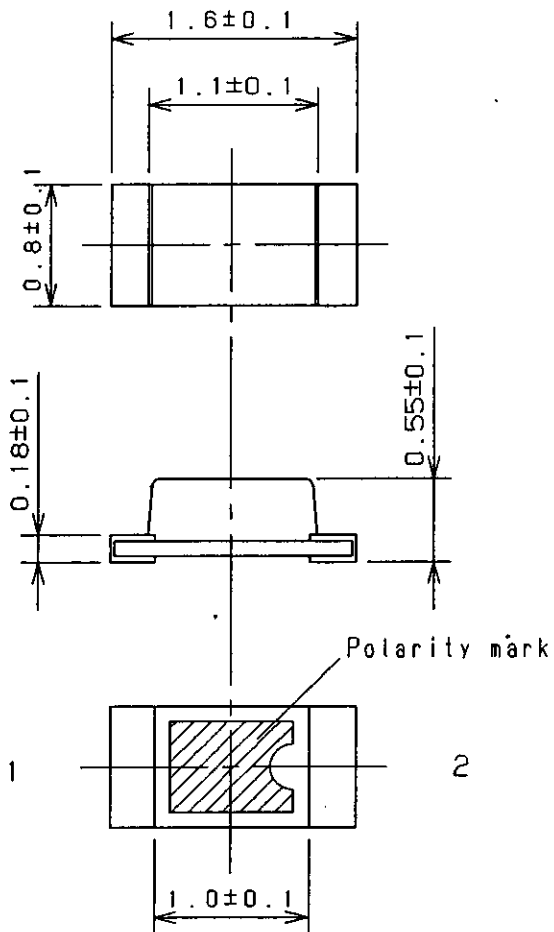


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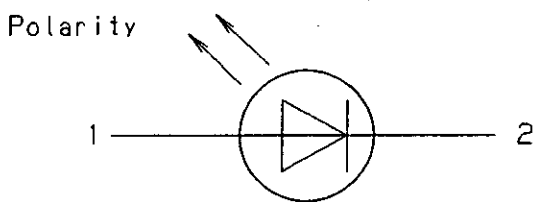
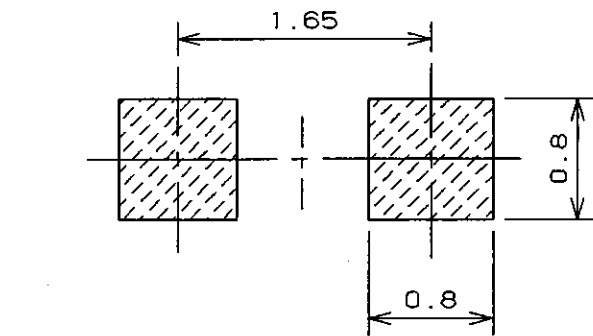
Approved Checked Designed

K. Sakurai

DEVELOPMENT SPECIFICATION (O U T L I N E) Tentative P/N:LNJ412K84RA



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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