



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Approved	Checked	Designed	DEVELOPMENT SPECIFICATION			
		<i>K. A. Akashi</i>	Tentative P/N: LNJ208R82RA			

T Y P E	Red Light Emitting Diode					
APPLICATION	Indicators					
MATERIAL	InGaAlP					
OUTLINE	Attached					
ABSOLUTE MAXIMUM RATINGS	P	*1 I <sub>FP</sub>	I <sub>FDC</sub>	V <sub>R</sub>	Topr	Tstg
	55	60	20	4	-25~+85	-40~+100
	mW	mA	mA	V	°C	°C
CONDITION	T <sub>a</sub> = 25 ± 3 °C					

Test Specification

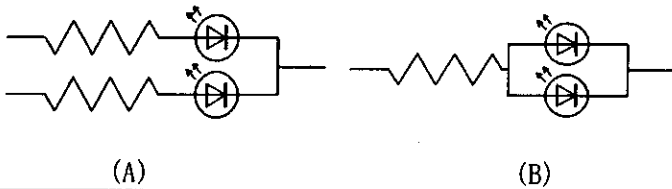
Item	Symbol	Condition	Typ.	Limit		Unit
				Min	Max	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 10 mA	1.92		2.5	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 4 V			100	μA
Luminous Intensity *2	I <sub>O</sub>	I <sub>F</sub> = 10 mA DC	15	8		mcd
Peak Emission Wavelength	λ <sub>p</sub>	I <sub>F</sub> = 10 mA DC	645			nm
Spectral Line Half Width	Δλ	I <sub>F</sub> = 10 mA DC	22			nm

- \*1 · The Condition of I<sub>FP</sub> 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<sub>F</sub> characteristics of each LED.

Oct. 20. 2001

Approved

Checked

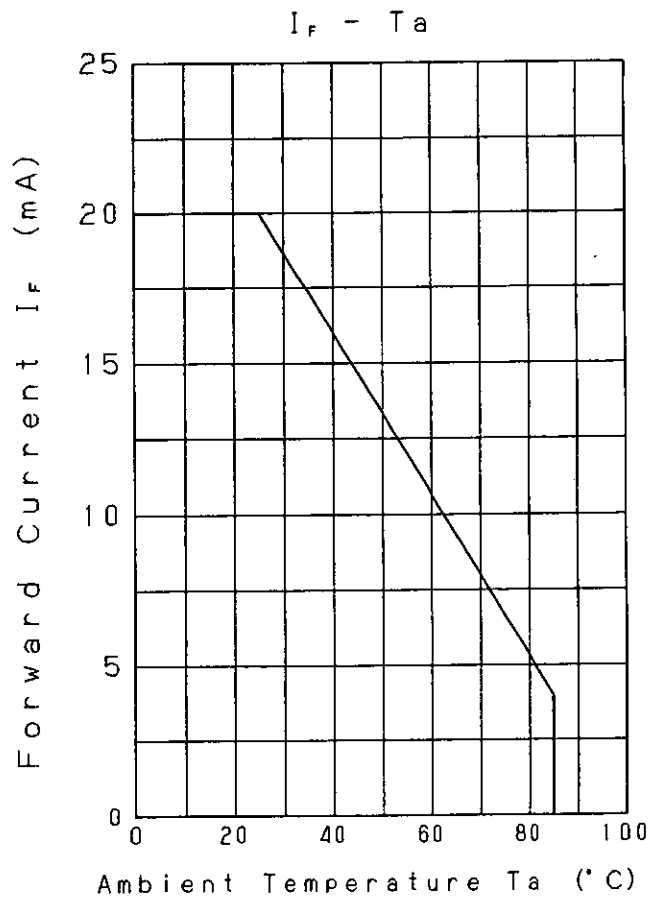
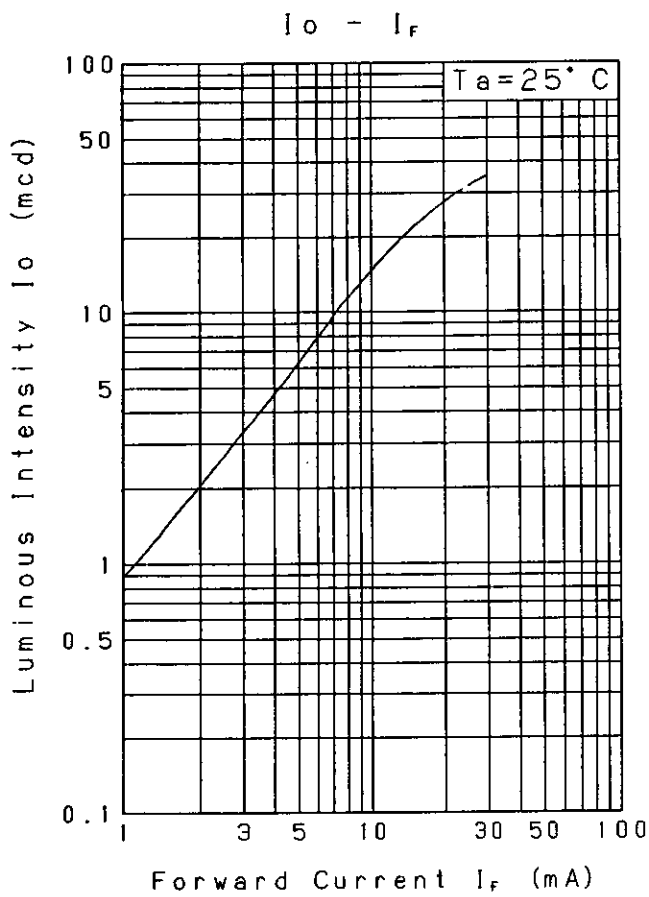
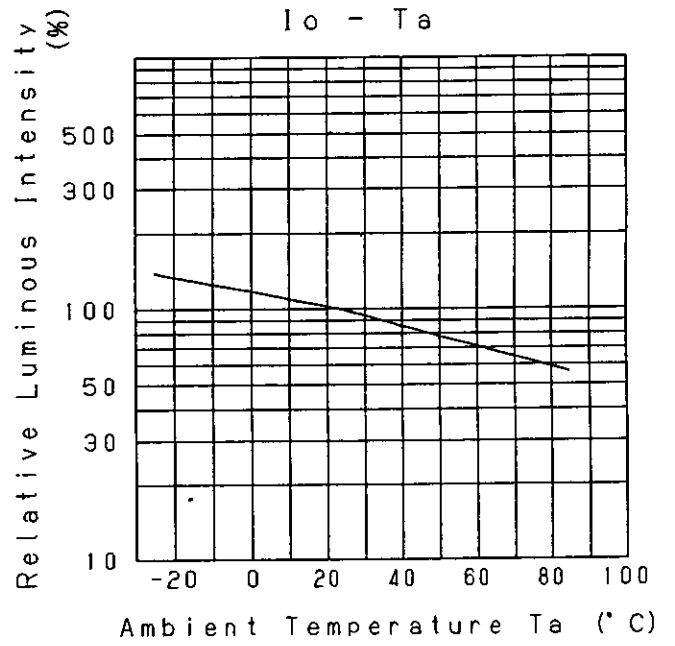
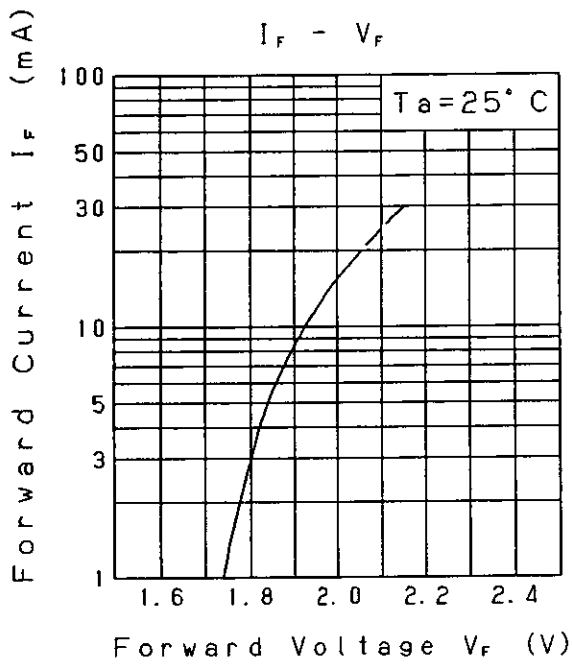
Designed

# DEVELOPMENT SPECIFICATION

Tentative

P/N:LNJ208R82RA

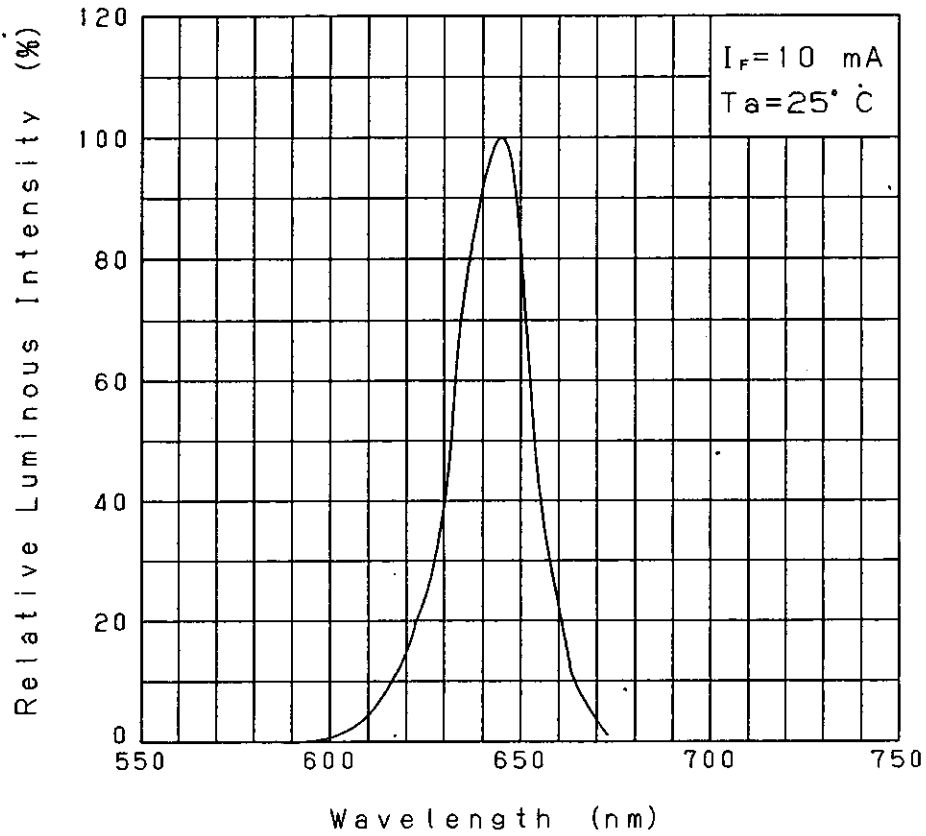
*K. Sakurai*



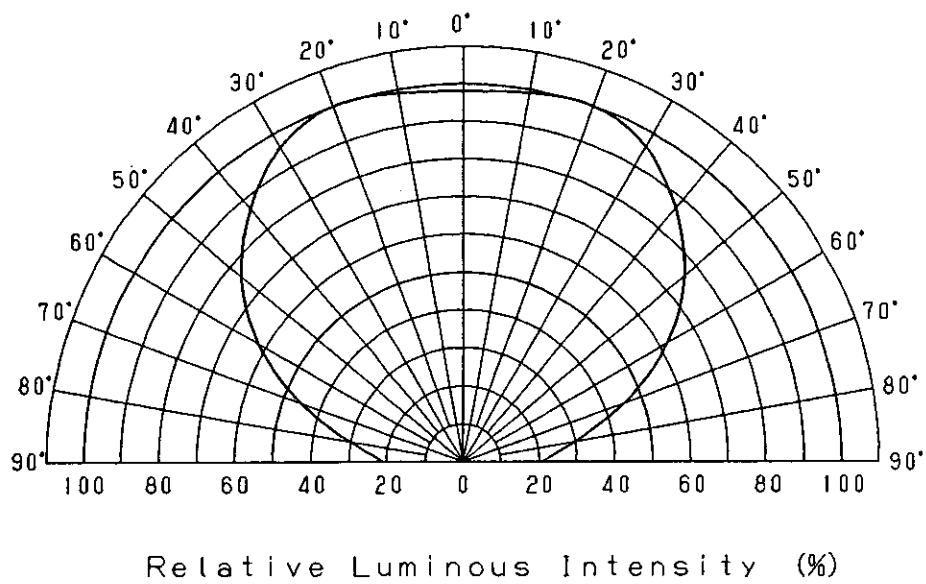
Oct. 20. 2001

Approved	Checked	Designed	DEVELOPMENT SPECIFICATION Tentative P/N:LNJ208R82RA			
		<i>K. Sakurai</i>				

Relative Luminous Intensity  
Wavelength Characteristics

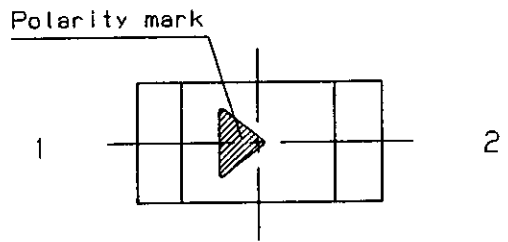
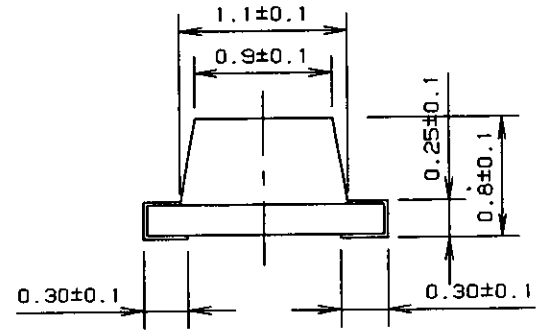
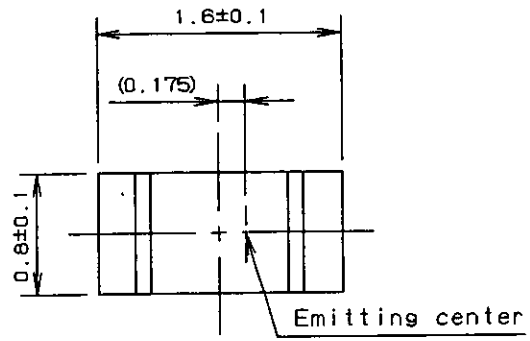


Directive Characteristics

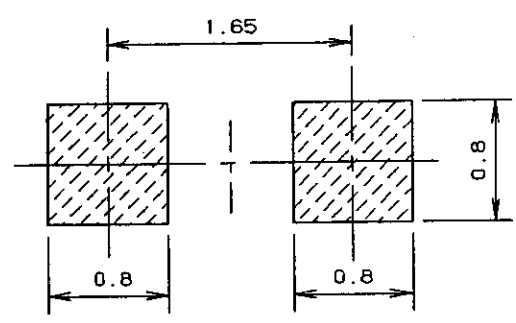


Oct.20.2001			

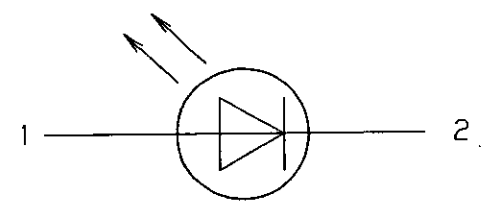
Approved	Checked	Designed <i>K. Ishida</i>	DEVELOPMENT SPECIFICATION		
			Tentative		
			P/N:LNJ208R82RA		



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			
---------------	--	--	--