

Approved	Checked	Designed	DEVELOPMENT SPECIFICATION	TEMPORARY
	<i>h.w.</i>	<i>M. Miyake</i>		

T Y P E	Green Light Emitting Diode					
A P P L I C A T I O N	Indicators					
M A T E R I A L	GaP					
O U T L I N E	Attached					
A B S O L U T E	P	*1 I <sub>FP</sub>	I <sub>FIX</sub>	V <sub>R</sub>	Topr	Tstg
M A X I M U M	40	50	15	4	-30~+85	-40~+100
R A T I N G S	mW	mA	mA	V	°C	°C
C O N D I T I O N	T <sub>a</sub> = 25 ± 3 °C					

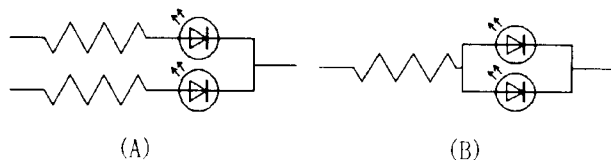
T e s t   S p e c i f i c a t i o n

I t e m	Symbol	C o n d i t i o n	Typ	Limit		Unit
				Min	Max	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 10 mA	2.03		2.6	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 4 V			10	μA
Luminous Intensity *2	I <sub>O</sub>	I <sub>F</sub> = 10 mA DC	3.7	2.0		md
Peak Emission Wavelength	λ <sub>p</sub>	I <sub>F</sub> = 10 mA DC	565			nm
Spectral Line Half Width	Δλ	I <sub>F</sub> = 10 mA DC	30			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. Soldering conditions.  
Refer to Handling note.
- ★3. Care should be taken that soldering is done within 3-days after opening the dry package and reel.
- ★4. 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.

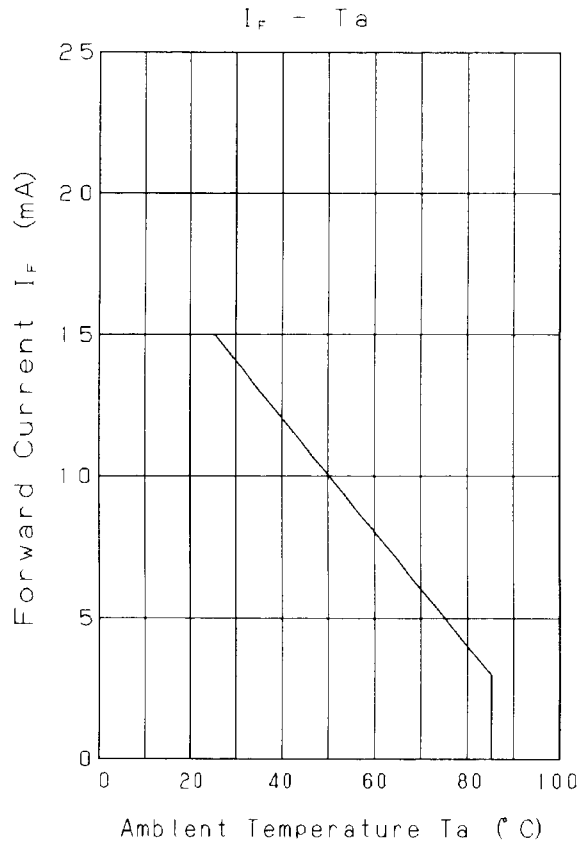
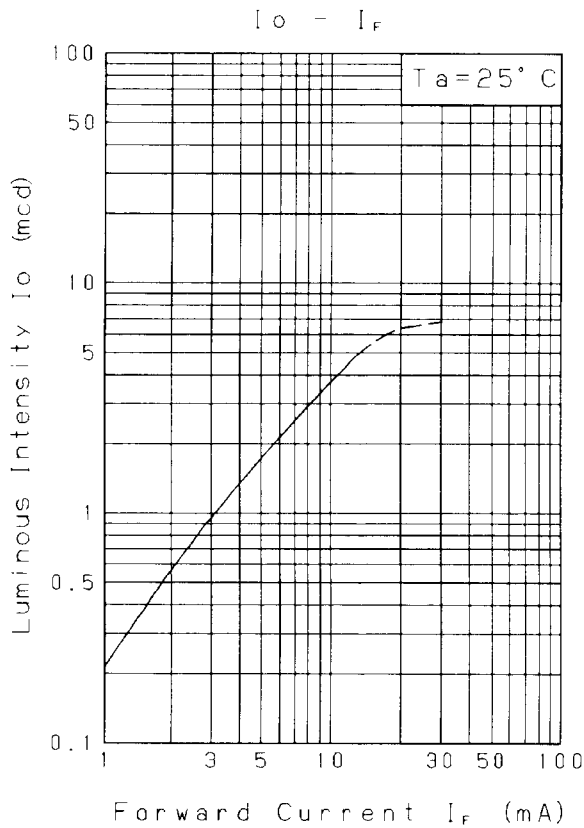
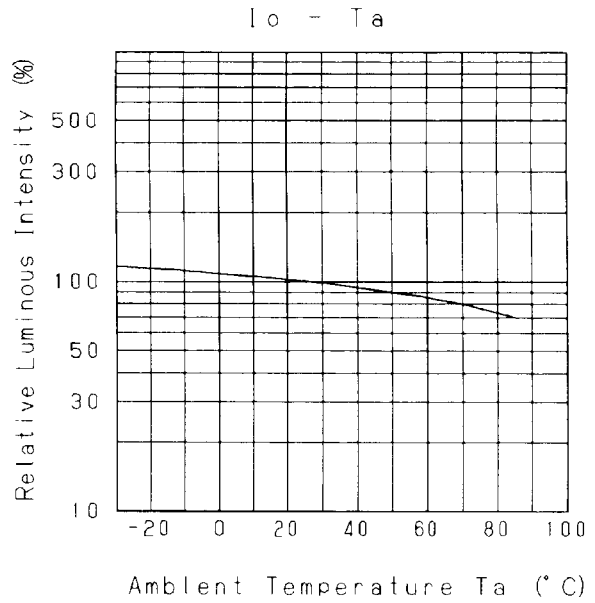
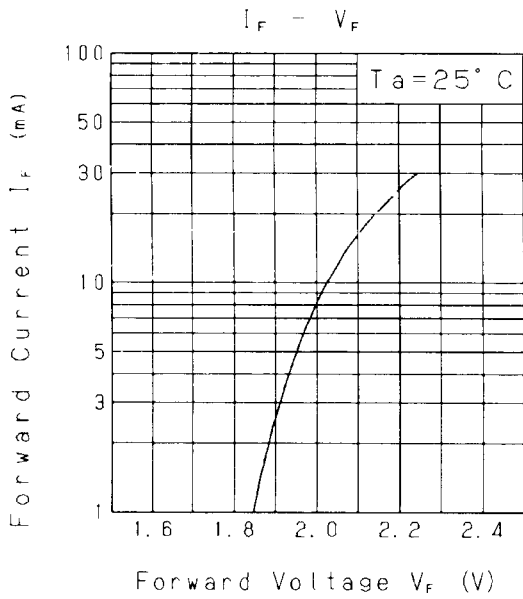
Mar. 23. 2000			

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	<i>h. h. h.</i>	<i>M. Meyer</i>

# DEVELOPMENT SPECIFICATION

Tentative: LNJ319G9TRA

TEMPORARY



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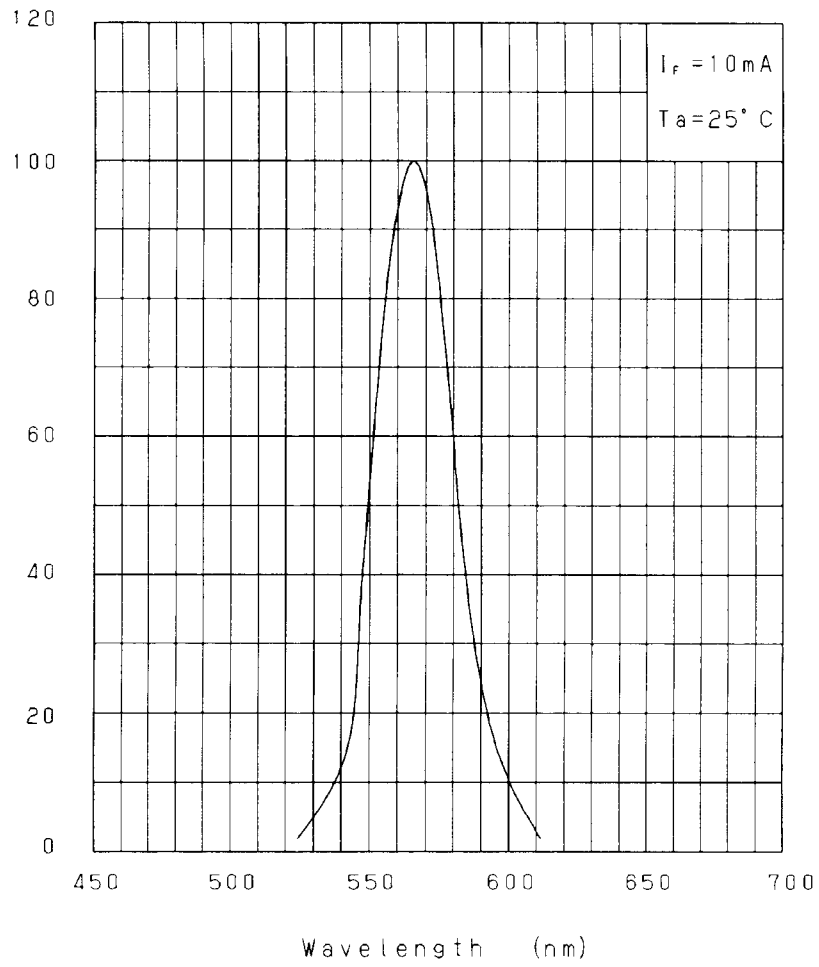
Approved	Checked	Designed
	<i>[Signature]</i>	<i>[Signature]</i>

# DEVELOPMENT SPECIFICATION

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Relative Luminous Intensity  
Wavelength Characteristics



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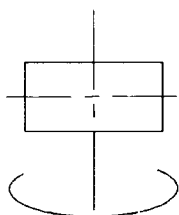
Checked

Designed

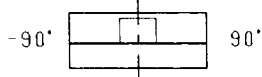
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TEMPORARY



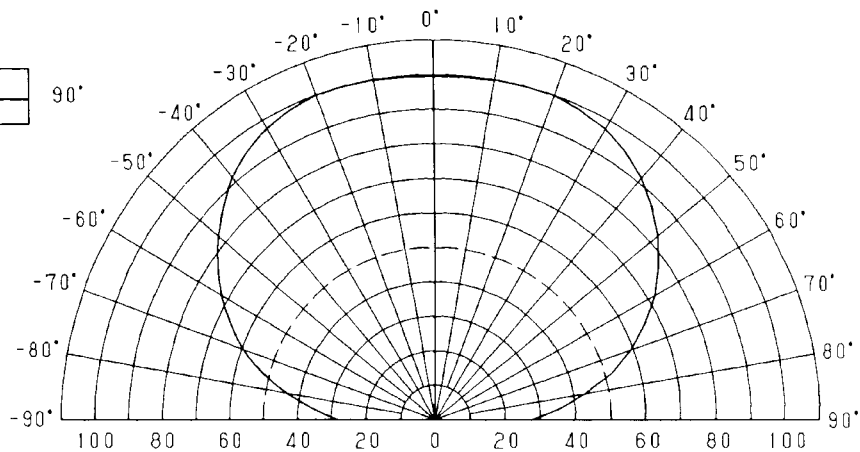
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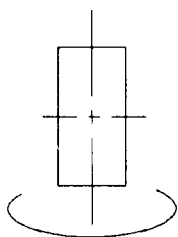
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90°

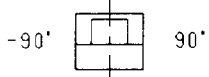
### Directive Characteristics



### Relative Luminous Intensity (%)



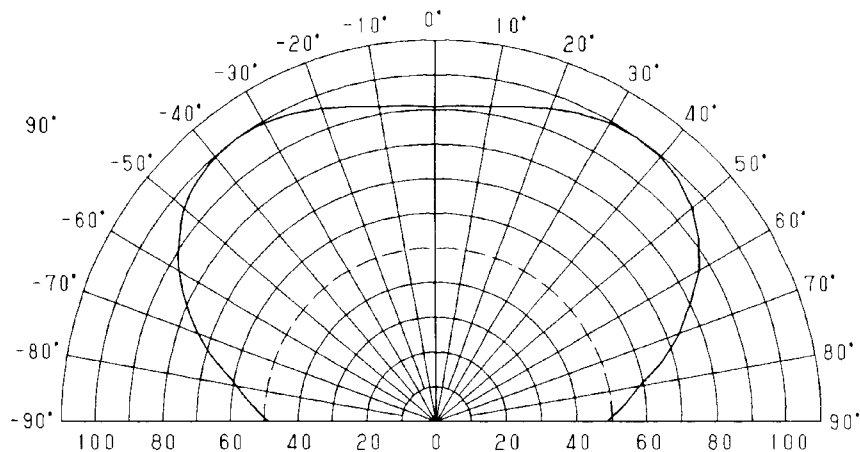
0°



-90°

90°

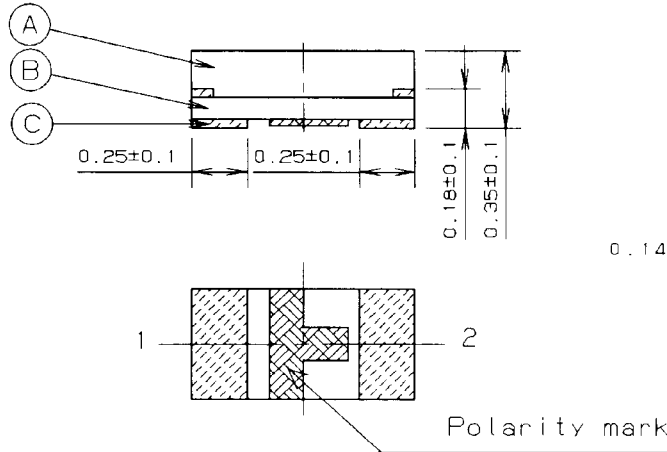
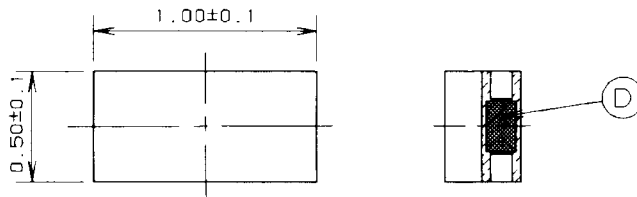
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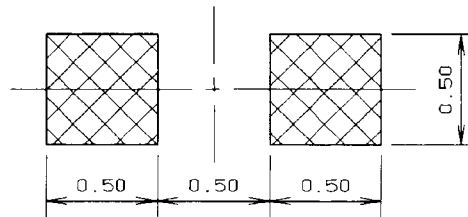
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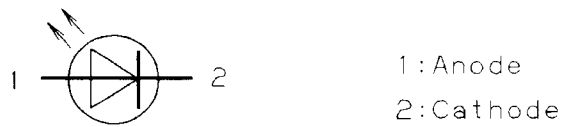
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Recommended Land Layout



Polarity



NOTE)

1. Measurement of the package doesn't include electrode projection.
2. Unit:mm
3. Materials; (A) Epoxy resin  
(B) Substructure  
(C) Terminal (Cu/Ni/Au plating)  
(D) Potting resin

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