

Approved	Checked	Designed	DEVELOPMENT SPECIFICATION	<table border="1"> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="3" style="text-align: center;">TEMPORARY</td> </tr> </table>						TEMPORARY		
TEMPORARY												
		T. Tabata	P/N: LN J 2 1 1 R 8 2 R A									

T Y P E	Red Light Emitting Diode					
A P P L I C A T I O N	Indicators					
M A T E R I A L	InGaAlP					
O U T L I N E	Attached					
A B S O L U T E M A X I M U M R A T I N G S	P	*1 I <sub>FP</sub>	I <sub>FDC</sub>	V <sub>R</sub>	Topr	Tstg
	55	60	20	4	-30~+85	-40~+100
	mW	mA	mA	V	°C	°C
C O N D I T I O N	T <sub>a</sub> = 25 ± 3°C					

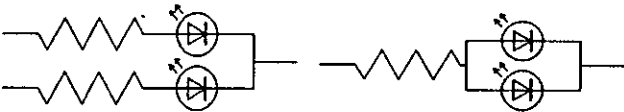
Test Specification

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	1.92		2.5	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 4 V			100	μ A
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
- \*2. Tolerance of luminous intensity : ±20%.

NOTE

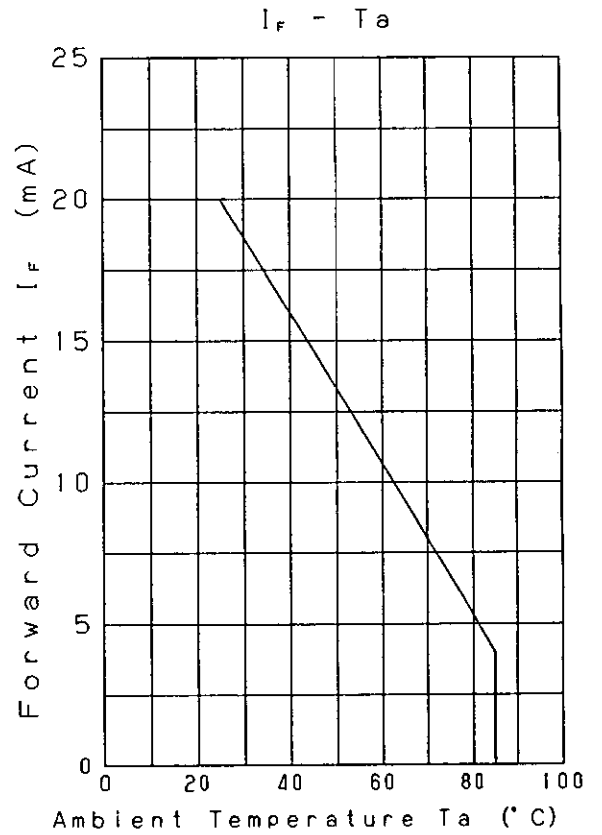
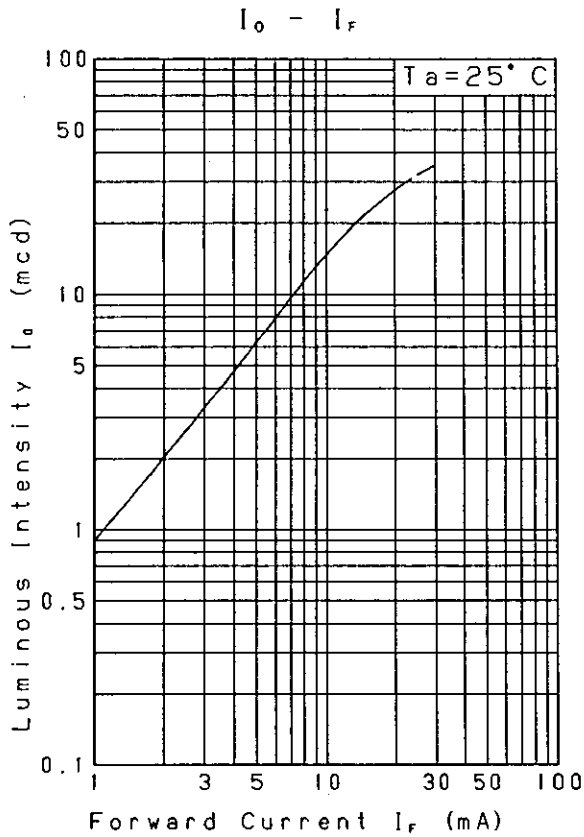
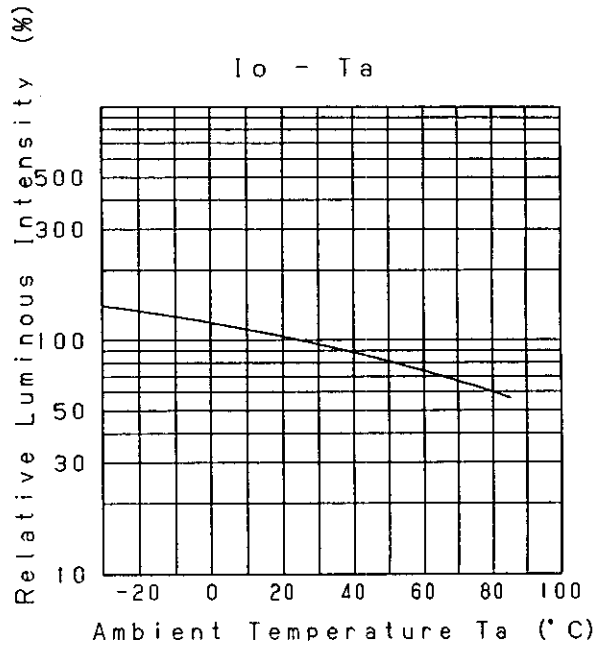
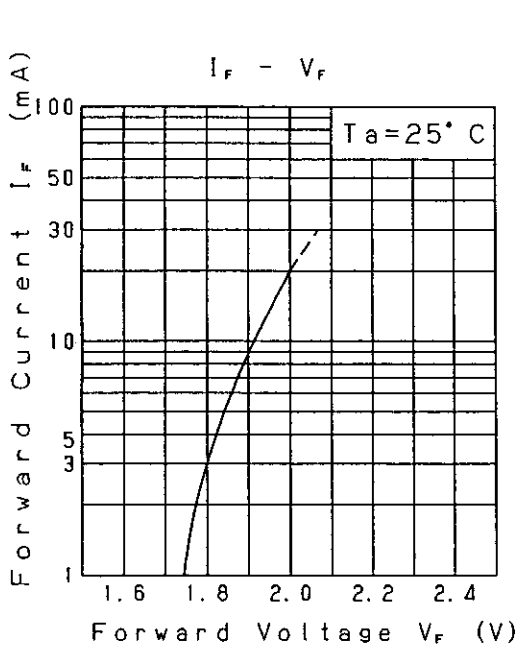
- ★1. Please contact the Panasonic local office if you design at low current (below 1mA DC) or pulse current operation and have any questions.
- ★2. Soldering conditions.....Refer to Handling note.
- ★3. Compositions of the lead ..... Cu/Ni/Au plating
- ★4. Beware of destruction by static electricity in handling the LED.
- ★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.

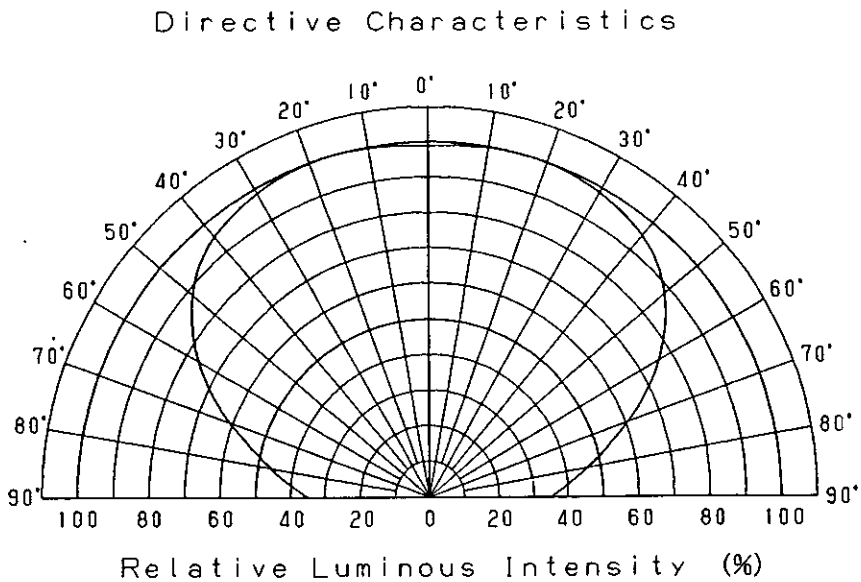
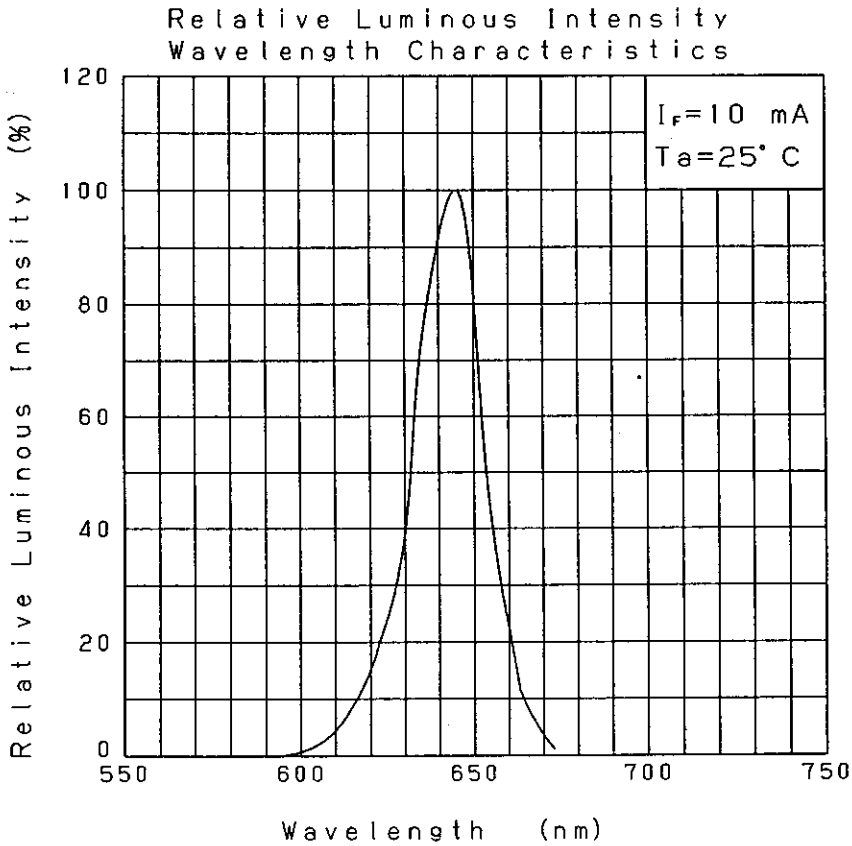
Oct. 20. 2001			

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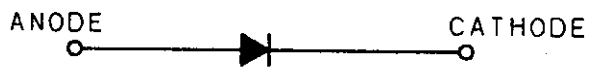
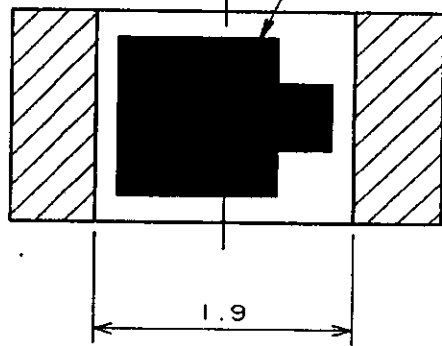
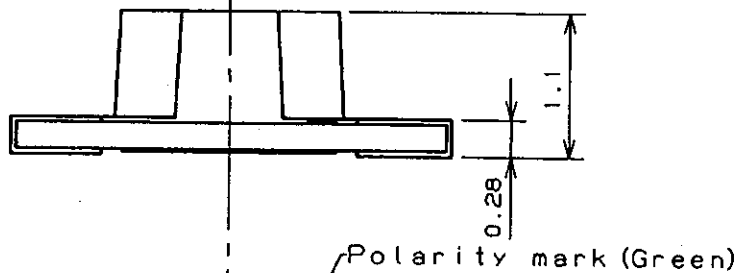
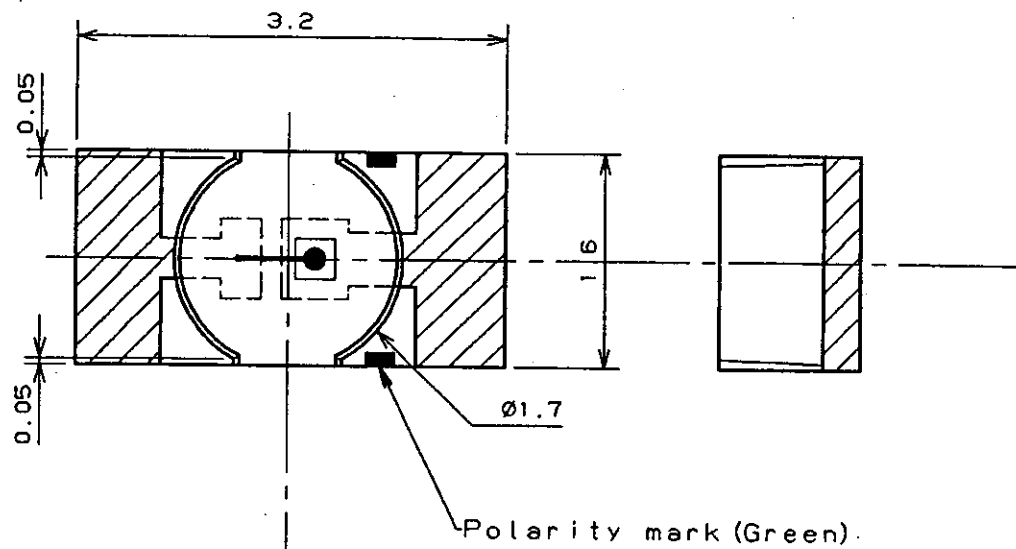
Oct.20.2001			
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		T. Tabata		



Oct.20.2001			

Approved	Checked	Designed	DEVELOPMENT SPECIFICATION (OUTLINE)		
<i>H. Yama</i>	<i>T. Shiba</i>	<i>T. Tabata</i>		P/N: _____	



(NOTE)  
 1. Unit: mm  
 2. Tolerance unless specified is  $\pm 0.15$ .  
 3. indicate Au terminal.

Jan. 14, 1989			
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