Approved	Checked	Designed
		T. Tabata

DEVELOPMENT SPECIFICATION

P/N : LNJ012X8BRA

TYPE	White Light Emitting Diode
APPLICATION	Indicators
MATERIAL	GaN
OUTLINE	Attached

ABSOLUTE MAXIMUM RATINGS

P	I_{FDC}	*1 I_{FP}	V_R	Topr	Tstg
40	10	50	5	-30～+85	-40～+100
mW	mA	mA	V	℃	℃

CONDITION: Ta = 25 ± 3 ℃

Test Specification

Item	Symbol	Condition	Typ.	Limit		Unit
				Min.	Max.	
Forward Voltage	V_F	I_F = 10 mA・DC	3.2		3.7	V
Reverse Leakage Current	I_R	V_R = 5 V			10	μA
Luminous Intensity *2	I_O	I_F = 10 mA・DC	76	47		mcd
Chromatic coordinates	x	I_F = 10 mA・DC	-	0.260	0.355	-
	y	I_F = 10 mA・DC	-	0.247	0.383	-

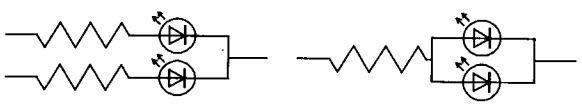
*1・The Condition of I_{FP} is duty 10 %, Pulse width 1 ms.
・Please contact the Panasonic local office if you design at low current (below 1 mA DC) or pulse current operation and have any questions.

*2・Tolerance of luminous intensity is ±20 %.

NOTE

1. Soldering conditions. Refer to Handling note.
2. Package; light white diffusion type
3. Care should be taken that soldering is done within 7-days after opening the dry package and reel.

Circuit model



(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.

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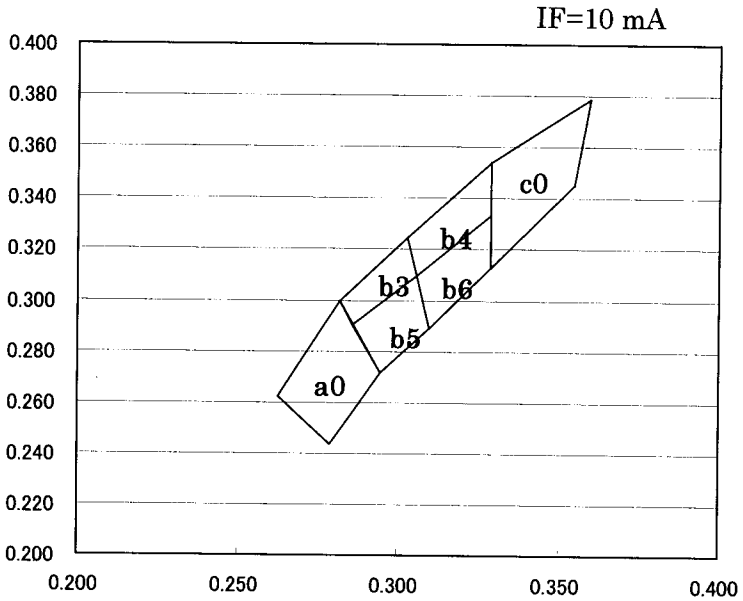
Classification of Chromatic coordinates



Ranks	x	y
a0	0.275	0.247
	0.291	0.275
	0.278	0.304
	0.260	0.266
b3	0.282	0.294
	0.302	0.314
	0.299	0.329
	0.278	0.304
b4	0.302	0.314
	0.325	0.338
	0.325	0.359
	0.299	0.329

Ranks	x	y
b5	0.291	0.275
	0.306	0.293
	0.302	0.314
	0.282	0.294
b6	0.306	0.293
	0.325	0.317
	0.325	0.338
	0.302	0.314
c0	0.325	0.317
	0.350	0.350
	0.355	0.383
	0.325	0.359

1. Chromatic coordinates will change by the level of operating current.
2. 6ranks classification of chromatic coordinates is available.
3. Tolerance of chromatic coordinates mesurement is ±0.02.

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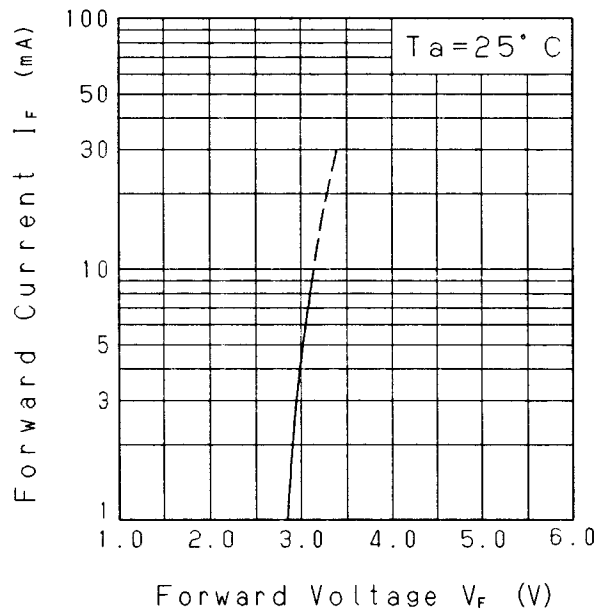
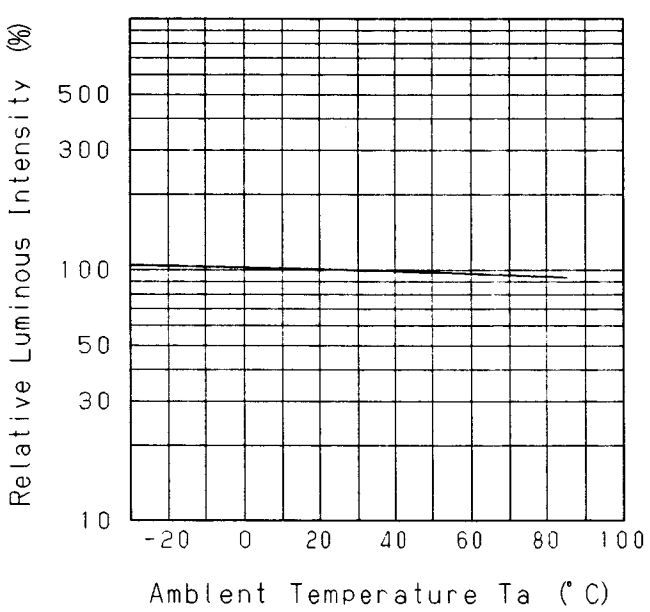
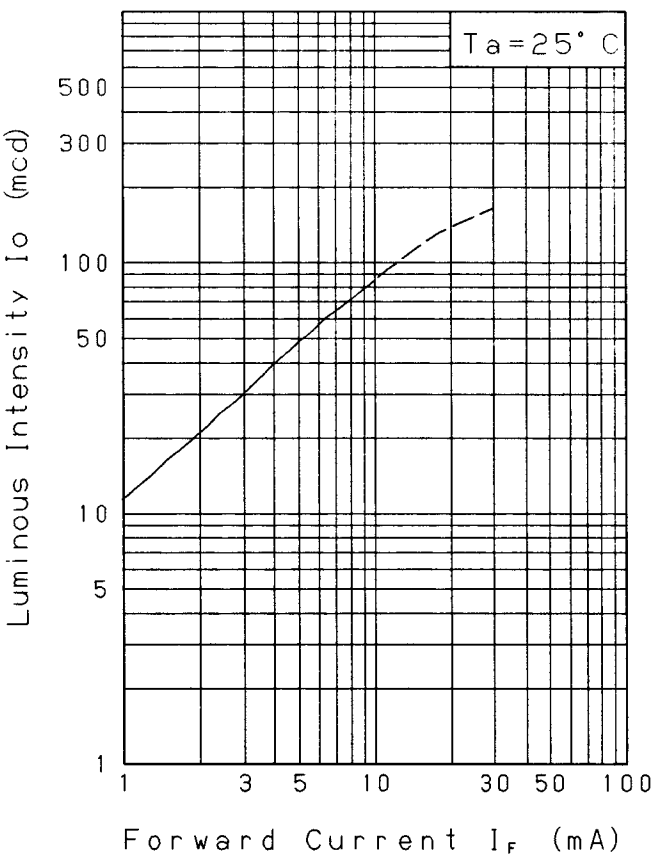
I_F - V_F



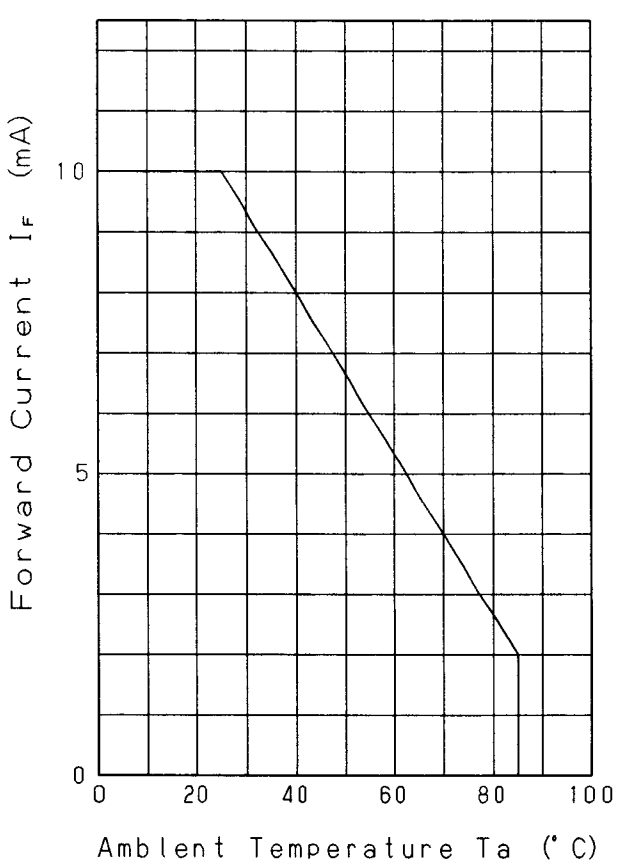
Io - Ta



Io - I_F



I_F - Ta



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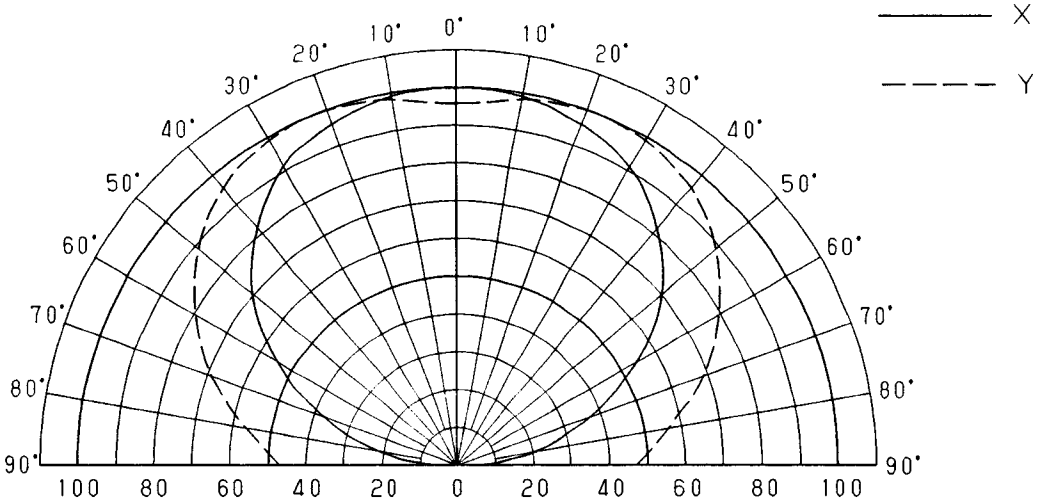
Directive Characteristics



Relative Luminous Intensity (%)

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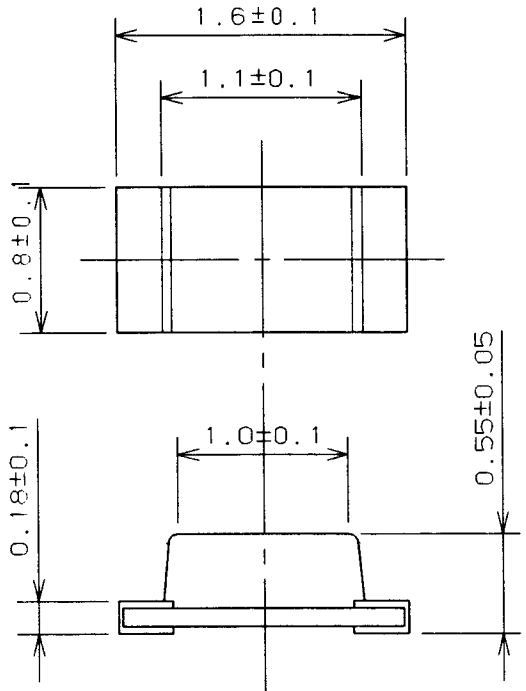
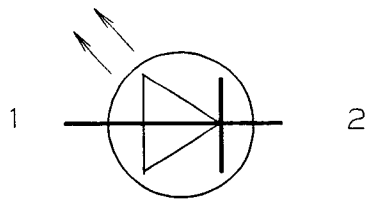
DEVELOPMENT SPECIFICATION

(OUTLINE)

P/N:LNJ012X8BRA

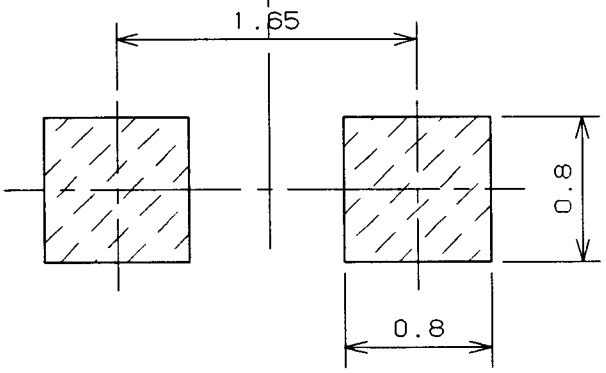


Polarity



1.Anode
2.Cathode

Recommended land layout



(NOTE)
1. Tolerance unless specified is ±0.15.
2. Uhit:mm

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