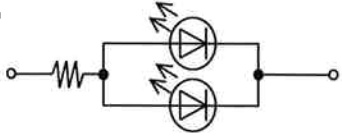
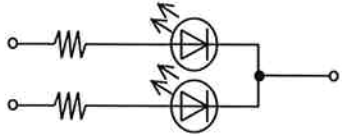
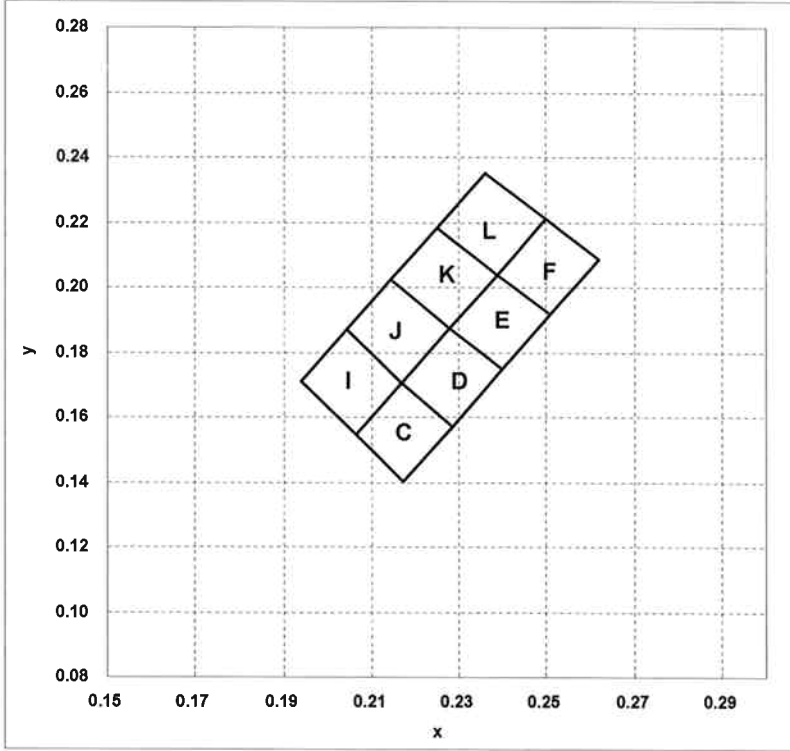


開発仕様/Tentative Specification		Prepared by <i>T. Onizuka</i> T. Onizuka	Checked by <i>J. Maeda</i> T. Maeda	Approved by <i>T. Ikeda</i> T. Ikeda								
品種名/Type Number: LNJ036X8ARA 松下統一品番/Matsushita Unified Parts Number : LNJ036X8ARA												
種別/Type	白色発光ダイオード / White Light Emitting Diode (ESS チップ LED/ Excellent Super Small type Chip LED)											
用途/Application	各種表示用/Indicators											
材質/Material	InGaN on SiC											
外形/Out line	附図/Attached											
絶対最大定格 Absolute Maximum Ratings	(注 1)(Note1)											
	P	I_{FP}	I_{FDC}	V_R	T_{opr}	T_{stg}						
	40	40	10	5	-30 ~ +85	-40 ~ +100						
	mW	mA	mA	V	°C	°C						
試験条件/Condition	Ta=25 °C±3 °C											
電氣的・光学的特性/Electrical-Optical Characteristics (Ta=25 °C±3 °C)												
項目 Item	略号 Symbol	測定条件 Measuring Condition	Typ.	Limit		Unit						
				Min.	Max.							
順方向電圧降下 Forward Voltage	V_F	$I_F=5$ mA DC	2.9	-	3.2	V						
逆方向漏洩電流 Reverse Leakage Current	I_R	$V_R=5$ V	-	-	10	μA						
光度(軸上) (注 3)(Note3) Luminous Intensity	I_o	$I_F=5$ mA DC	35.0	25.0	56.0	mcd						
色度 (注 4)(Note4) Chromaticity coordinates	x	$I_F=5$ mA DC	-	0.194	0.262							
	y	$I_F=5$ mA DC	-	0.140	0.235							
<p>(注 1) I_{FP} の条件は、duty 10 %, Pulse width 1 ms. $I_{FDC}=1$ mA 以下およびパルス印加時間 pulse width 1 ms, duty 10 %未満の使用ならびに疑問点に関し ましては、お問い合わせのほどお願い申し上げます。</p> <p>(Note1) The condition of I_{FP} is duty 10 %, pulse width 1 ms Please contact us for further information regarding special operating conditions such as I_F: less than DC =1 mA I_{FP}: less than pulse width =1 ms, duty=10 %</p> <p>(注 3) 光度ランクについて (Note3) Rank classification of luminous intensity. (測定条件/condition ; $I_F=5$ mA)</p> <table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 5px;">Rank</td> <td style="padding: 5px;">光度(軸上) Luminous intensity (mcd)</td> </tr> <tr> <td style="padding: 5px;">1</td> <td style="padding: 5px;">25.0 ~ 38.0</td> </tr> <tr> <td style="padding: 5px;">2</td> <td style="padding: 5px;">38.0 ~ 56.0</td> </tr> </table> <p>測定公差/Measurement tolerance : ±20 %</p> <p>【回路設計上の注意/Circuit to operate LED.】</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>(A)</p>  </div> <div style="text-align: center;"> <p>(B)</p>  </div> </div> <p>※(A)の回路については、V_F の影響により光度バラツキが懸念されますので、(B)の回路推奨します。 ※(A) The difference of brightness between the LED could be found due to the V_F characteristics of each LED. (B) Recommended circuit.</p>							Rank	光度(軸上) Luminous intensity (mcd)	1	25.0 ~ 38.0	2	38.0 ~ 56.0
Rank	光度(軸上) Luminous intensity (mcd)											
1	25.0 ~ 38.0											
2	38.0 ~ 56.0											
2007-08-22												
Established	Revised											

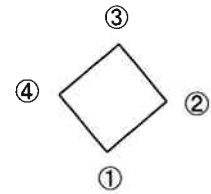
開発仕様/Tentative Specification

品種名/Type Number: LNJ036X8ARA
 松下統一品番/Matsushita Unified Parts Number :LNJ036X8ARA

(注4) 色度ランク分類 / (Note4) Rank classification of Chromaticity
 ($I_F=5mA$)

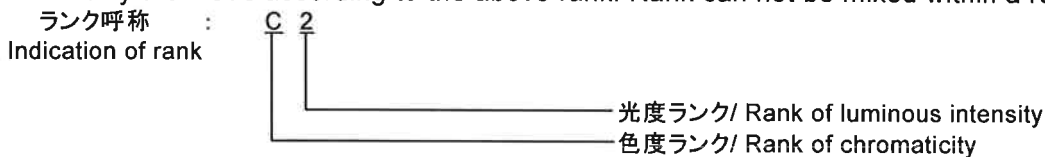


色度座標 No.
 Chromaticity coordinates number.



		①	②	③	④			①	②	③	④
C	x	0.217	0.228	0.217	0.206	I	x	0.206	0.217	0.204	0.194
	y	0.140	0.157	0.171	0.155		y	0.155	0.171	0.187	0.171
D	x	0.228	0.240	0.228	0.217	J	x	0.217	0.228	0.215	0.204
	y	0.157	0.175	0.188	0.171		y	0.171	0.188	0.202	0.187
E	x	0.240	0.251	0.239	0.228	K	x	0.228	0.239	0.225	0.215
	y	0.175	0.192	0.204	0.188		y	0.188	0.204	0.218	0.202
F	x	0.251	0.262	0.250	0.239	L	x	0.239	0.250	0.2360	0.225
	y	0.192	0.209	0.221	0.204		y	0.204	0.221	0.235	0.218

- *動作電流値により色度の変化が生じますのでご使用に際しては充分ご確認下さい。
 Change of chromaticity is caused by operating current, so be careful when handling it.
- *上記座標を結ぶ範囲内を色度ランクと呼ぶことと致します。
 We call the area which is composed by the above points rank of chromaticity.
- *上記ランク規格に従って分類を行います。同一リール内の混入はないものと致します。
 We classify the LEDs according to the above rank. Rank can not be mixed within a reel.

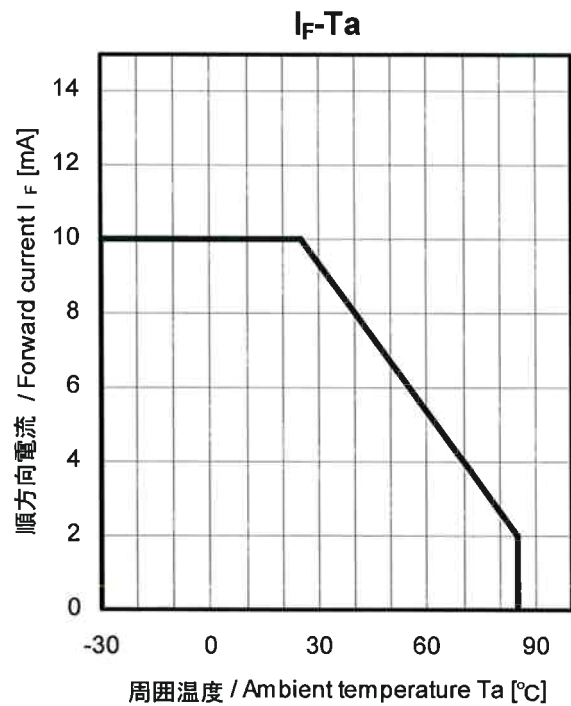
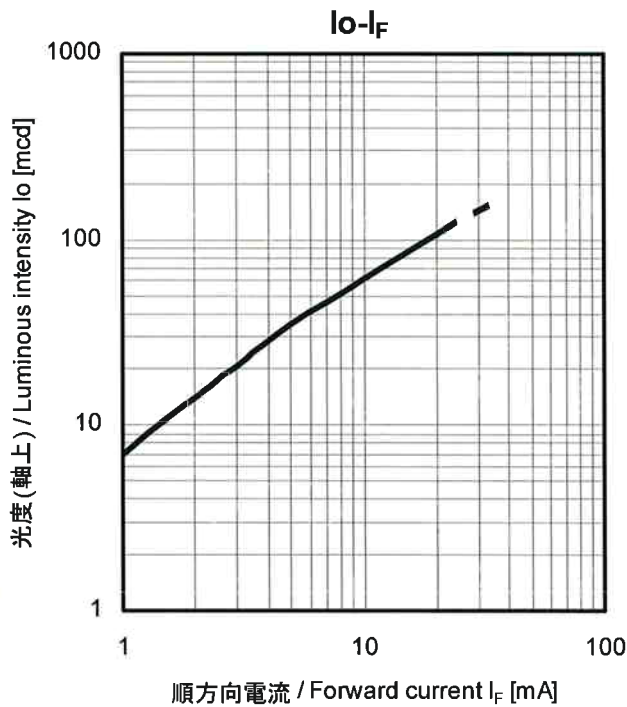
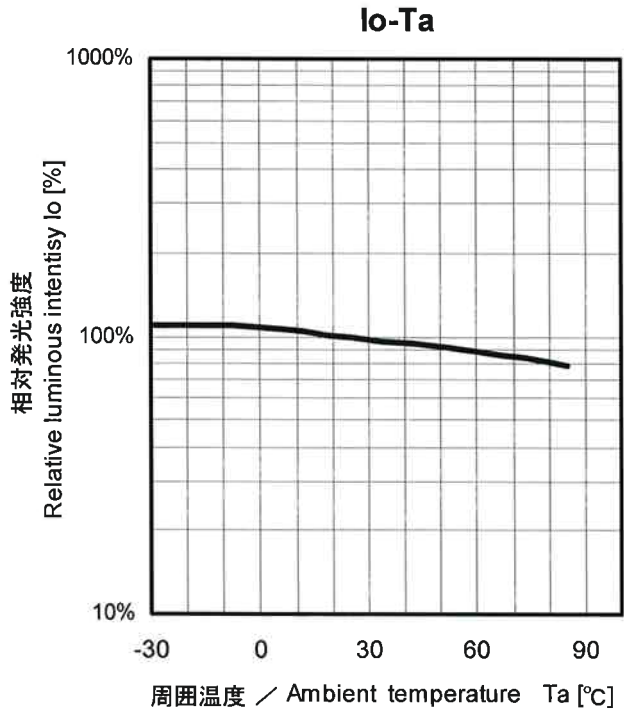
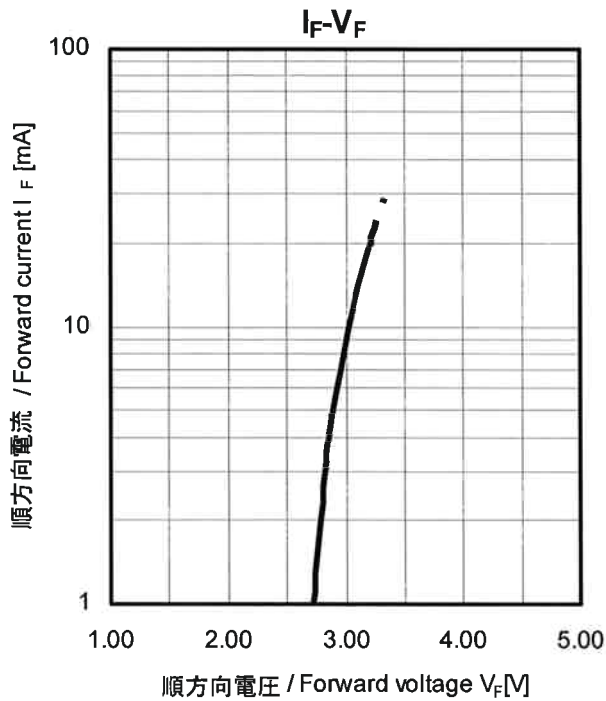


*色度測定公差: ± 0.02 を考慮下さい。
 Tolerance of chromaticity is ± 0.02 .

2007-08-22	
Established	Revised

開発仕様/Tentative Specification

品種名/Type Number: LNJ036X8ARA
 松下統一品番/Matsushita Unified Parts Number
 : LNJ036X8ARA



2007-08-22

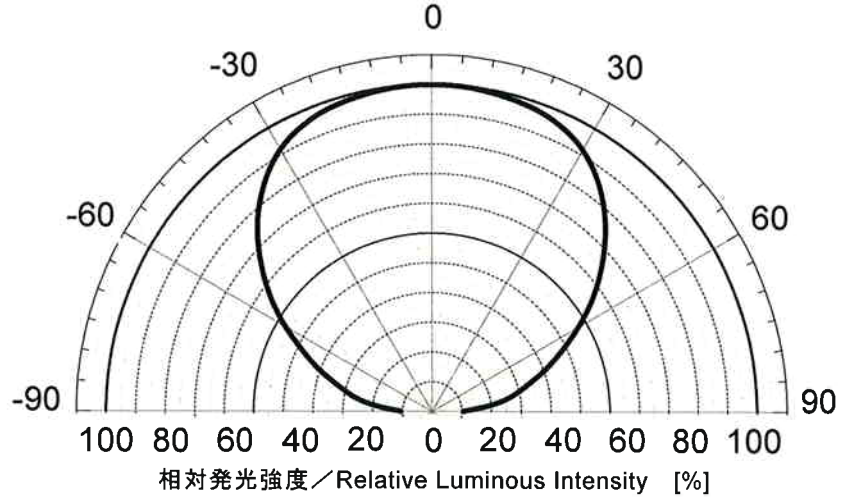
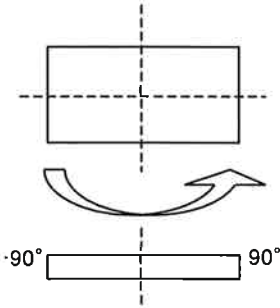
Established

Revised

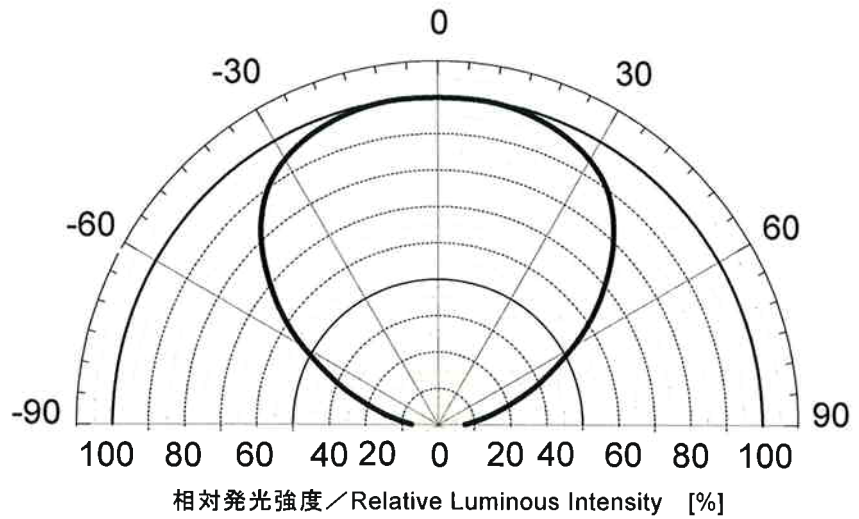
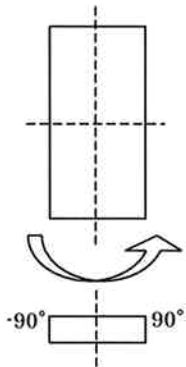
開発仕様/Tentative Specification

品種名/Type Number: LNJ036X8ARA
 松下統一品番/Matsushita Unified Parts Number :LNJ036X8ARA

指向特性 / Directive Characteristics



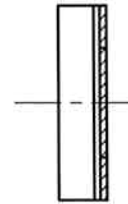
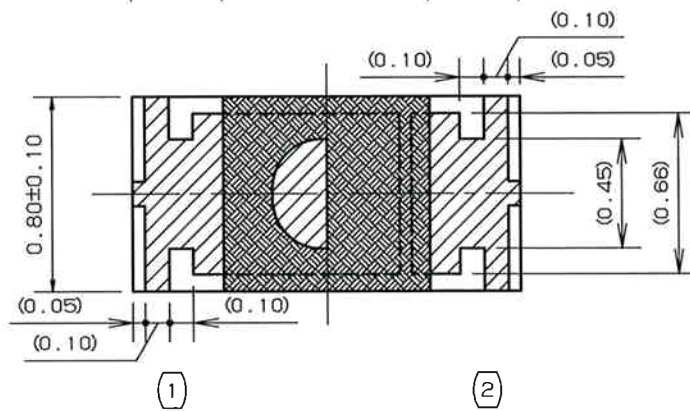
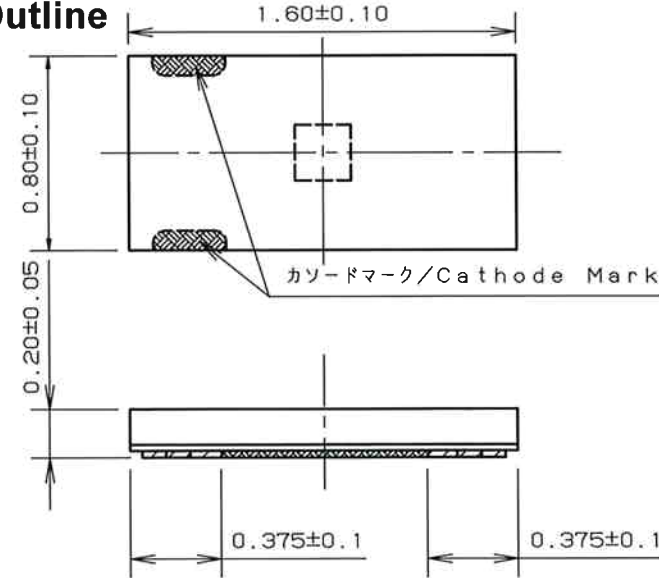
指向特性 / Directive Characteristics



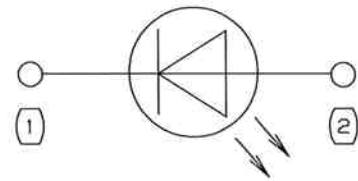
2007-08-22		
Established	Revised	

開発仕様/Tentative Specification
 外形図/Outline
 品種名/Type Number: LNJ036X8ARA
 松下統一品番/Matsushita Unified Parts Number
 : LNJ036X8ARA

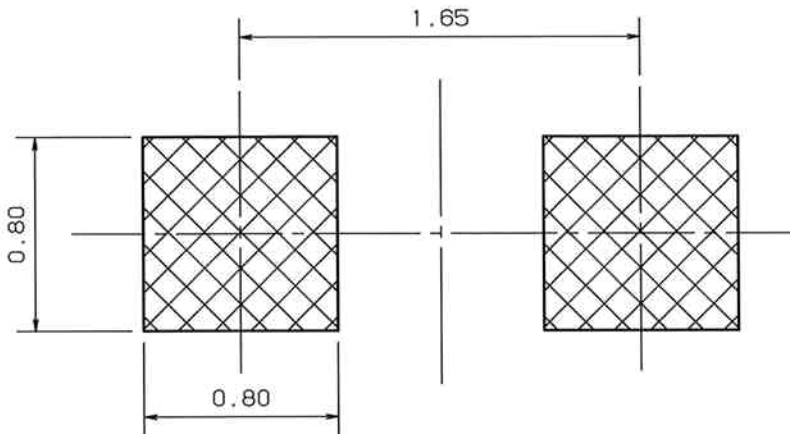
外形図/Outline



極性/Polarity



推奨ランドパターン/Recommended land layout



注記/Notes

1. パッケージ寸法については電極バリを含まない/Package dimensions don't include electrode projection.
2. 単位 : mm/Unit : mm
3. 半田厚みについて、は貴社にて十分ご検討下さい。(推奨厚み : t=0.10~0.15 mm)
 /About solder thickness, please examine the products yourself completely.
 (Recommended thickness : t=0.10 - 0.15 mm)

2007-08-22		
Established	Revised	