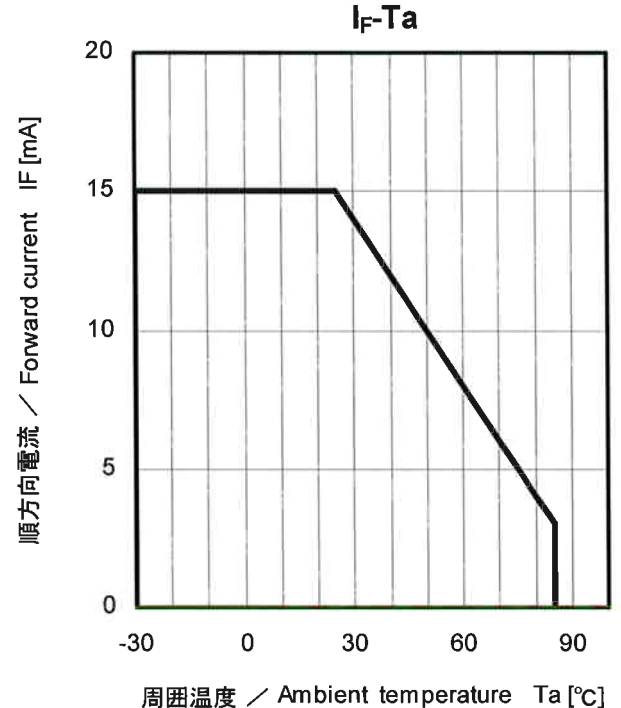
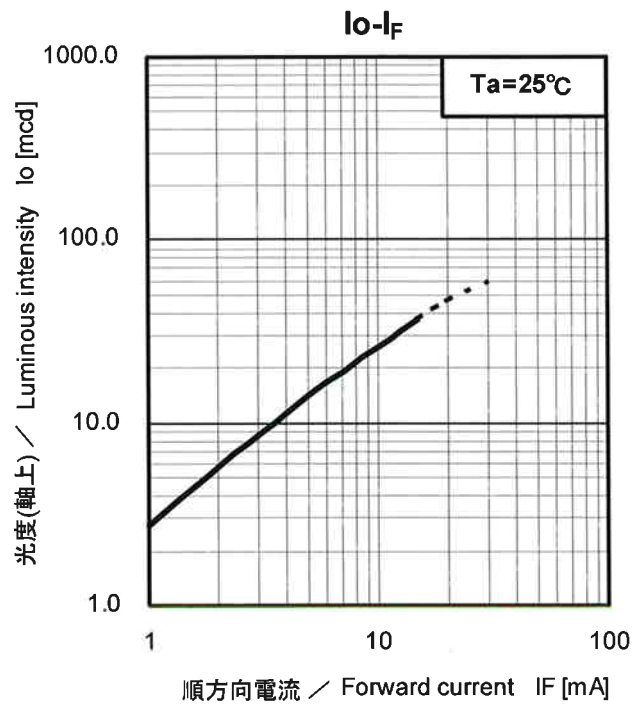
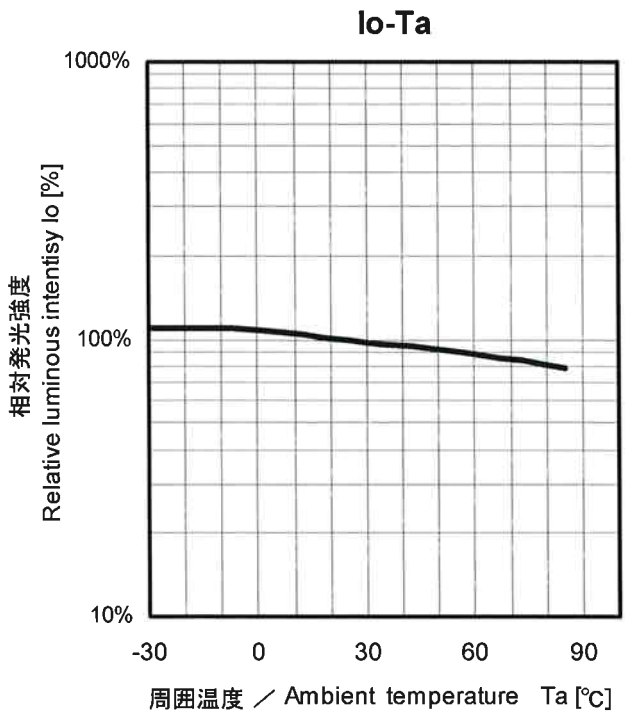
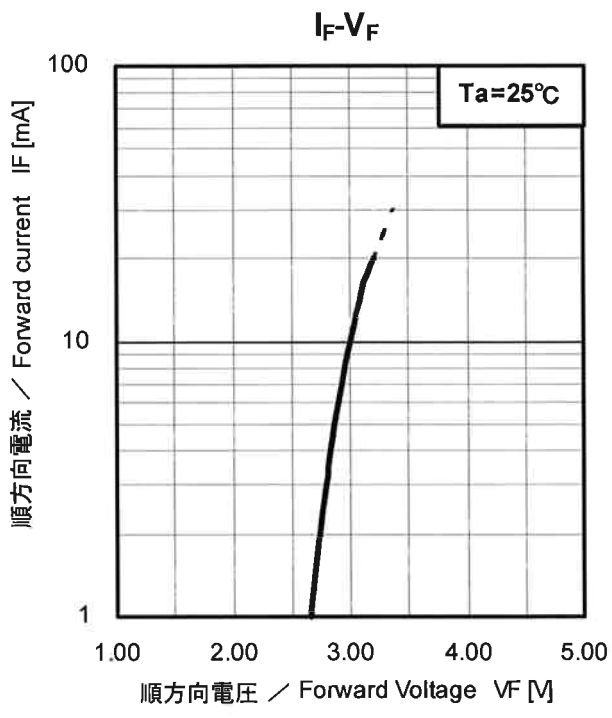


開発仕様/Tentative Specification		Prepared by <i>T. Onizuka</i> T. Onizuka	Checked by <i>T. Maeda</i> T. Maeda	Approved by <i>T. Ikeda</i> T. Ikeda										
品種名/Type Number: LNJ936W8CRA 松下統一品番/Matsushita Unified Parts Number : LNJ936W8CRA														
種別/Type	ブルー発光ダイオード / Blue Light Emitting Diode (ESS 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 <sub>FP</sub>	I <sub>FDC</sub>	V <sub>R</sub>	Topr	Tstg								
	65	55	15	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 <sub>F</sub>	I <sub>F</sub> =5 mA DC	2.9	—	3.2	V								
逆方向漏洩電流 Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5 V	—	—	10	μA								
光度(軸上) (注 2)(Note2) Luminous Intensity	I <sub>o</sub>	I <sub>F</sub> =5 mA DC	14.0	8.5	24.6	mcd								
ドミナント発光波長 (注 3)(Note3) Dominant Emission Wavelength	λ <sub>d</sub>	I <sub>F</sub> =5 mA DC	472	467	477	nm								
ピーク発光波長 Peak Emission Wavelength	λ <sub>p</sub>	I <sub>F</sub> =5 mA DC	465			nm								
スペクトル半値幅 Spectral Line Half Width	Δλ	I <sub>F</sub> =5 mA DC	20			nm								
<p>(注 1) ・I<sub>FP</sub> の条件は、duty 10 %, Pulse width 1 ms。 I<sub>FDC</sub>=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<sub>FP</sub> is duty 10 %,pulse width 1 ms Please contact us for further information regarding special operating conditions such as I<sub>F</sub>: less than DC =1 mA I<sub>FP</sub>: less than pulse width =1 ms, duty=10 %</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>(注 2) 光度ランクについて (Note2) Rank classification of luminous intensity. (測定条件/condition ; I<sub>F</sub>=5 mA)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Rank</th> <th>光度(軸上) Luminous intensity (mcd)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8.5 ~ 14.5</td> </tr> <tr> <td>2</td> <td>14.5 ~ 24.6</td> </tr> </tbody> </table> </div> <div style="width: 45%;"> <p>(注 3) 波長ランクについて (Note2) Rank classification of dominant wavelength. (測定条件/condition ; I<sub>F</sub>=5 mA)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>ドミナント発光波長 Dominant Emission Wavelength (nm)</th> </tr> </thead> <tbody> <tr> <td>467 ~ 477</td> </tr> </tbody> </table> </div> </div> <p style="text-align: center;">測定公差/Measurement tolerance : ±20 %                      測定公差/Measurement tolerance : ±2 nm</p>							Rank	光度(軸上) Luminous intensity (mcd)	1	8.5 ~ 14.5	2	14.5 ~ 24.6	ドミナント発光波長 Dominant Emission Wavelength (nm)	467 ~ 477
Rank	光度(軸上) Luminous intensity (mcd)													
1	8.5 ~ 14.5													
2	14.5 ~ 24.6													
ドミナント発光波長 Dominant Emission Wavelength (nm)														
467 ~ 477														
<p>(注 4)(Note4) ・静電気による製品破壊にご注意ください。/Be careful of the product destruction by static electricity.</p> <p>(注 5)(Note5) ・回路設計上の注意/Circuit to operate LED.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <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<sub>F</sub>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<sub>F</sub> characteristics of each LED. (B) Recommended circuit.</p>														
2007-08-22														
Established		Revised												

開発仕様/Tentative Specification

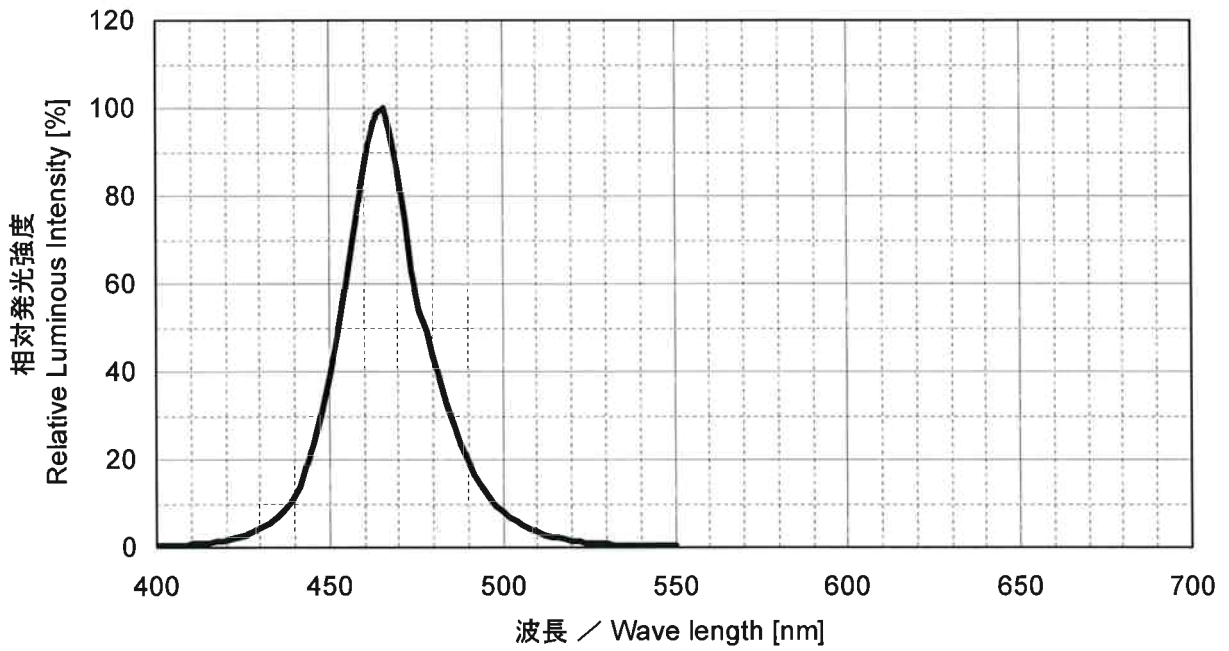
品種名/Type Number: LNJ936W8CRA  
 松下統一品番/Matsushita Unified Parts Number : LNJ936W8CRA



2007-08-22	
Established	Revised

開発仕様/Tentative Specification  
品 種 名 /Type Number:LNJ936W8CRA  
松 下 統 一 品 番 /Matsushita Unified Parts Number  
:LNJ936W8CRA

相对発光強度 - 波長特性  
Relative Luminous Intensity Wavelength Characteristics

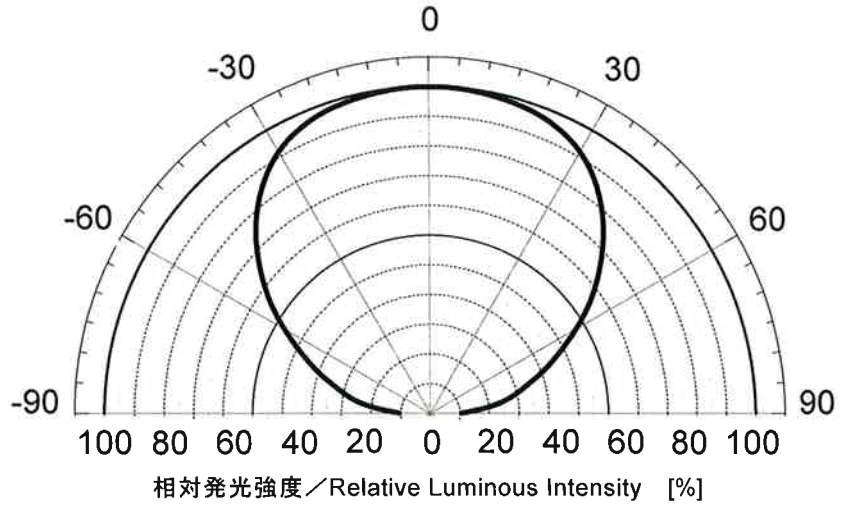
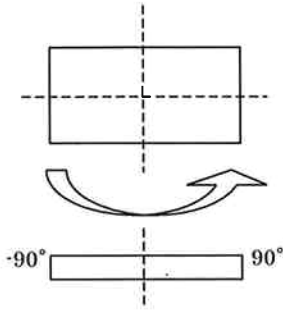


2007-08-22	
Established	Revised

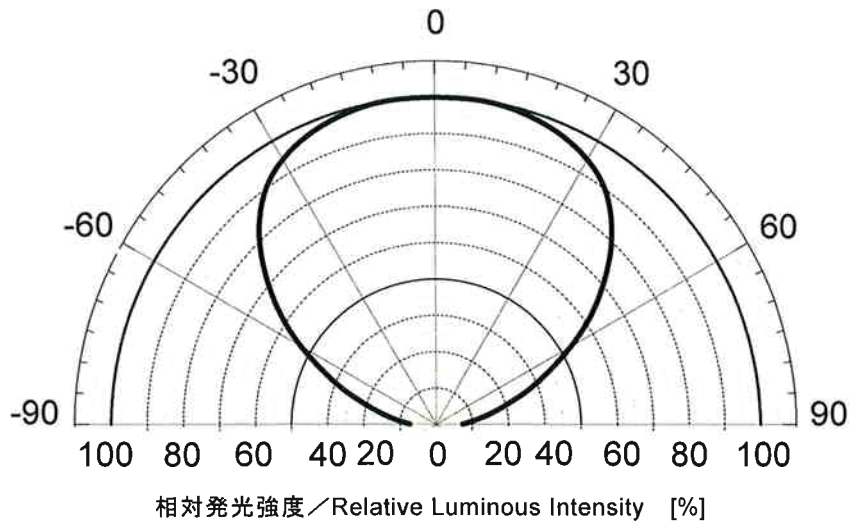
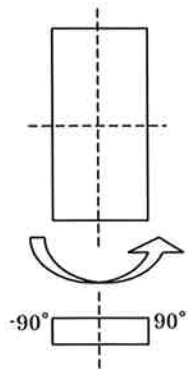
開発仕様/Tentative Specification

品名/Type Number: LNJ936W8CRA  
 松下統一品番/Matsushita Unified Parts Number : LNJ936W8CRA

**指向特性 / Directive Characteristics**



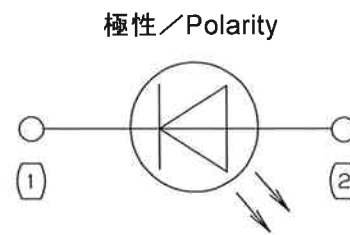
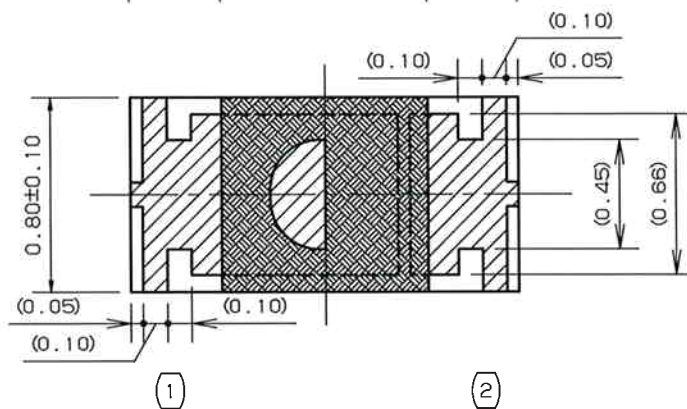
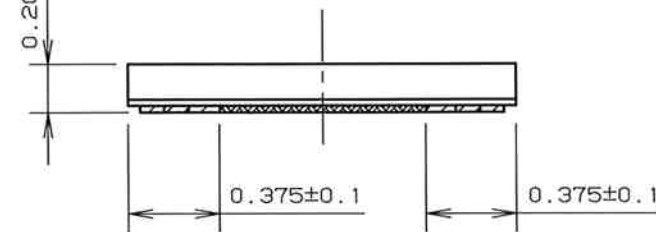
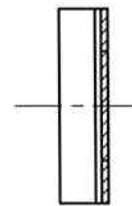
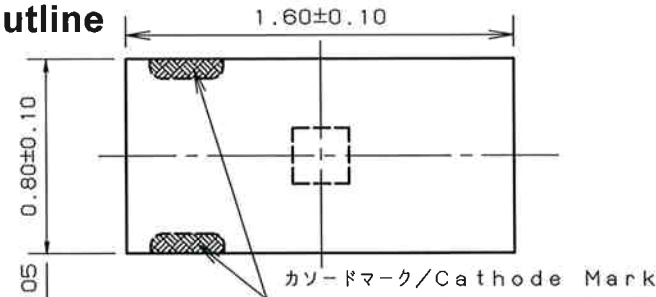
**指向特性 / Directive Characteristics**



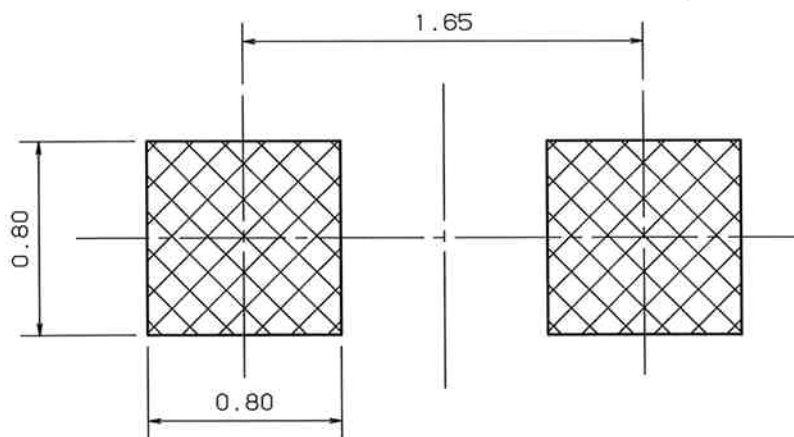
2007-08-22		
Established	Revised	

開発仕様/Tentative Specification  
 外形図/Outline  
 品名/Type Number: LNJ936W8CRA  
 松下統一品番/Matsushita Unified Parts Number  
 : LNJ936W8CRA

**外形図/Outline**



**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	