

### LM1-NNN1-01

#### Features

Indoor and Outdoor Displays  
Backlighting  
Coupling into Light Guides  
RGB Full Color Displays

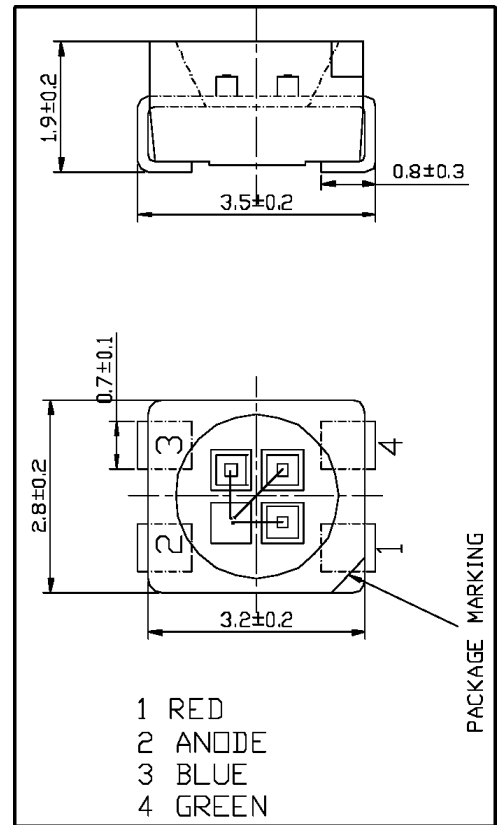


### ATTENTION

OBSERVE PRECAUTIONS  
ELECTROSTATIC  
SENSITIVE DEVICES

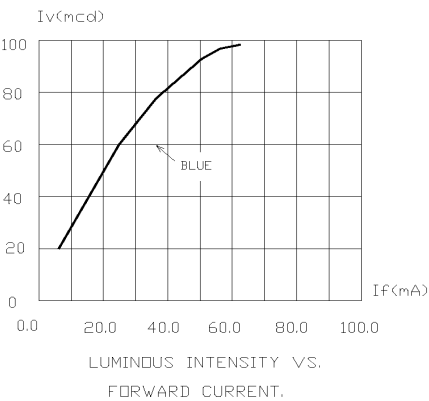
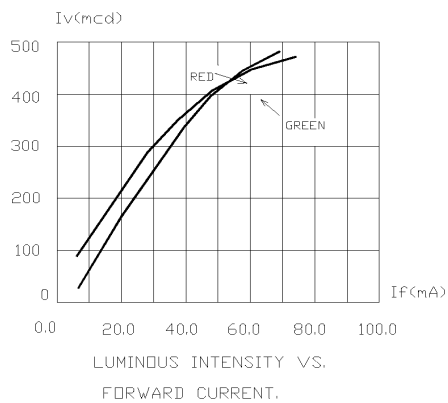
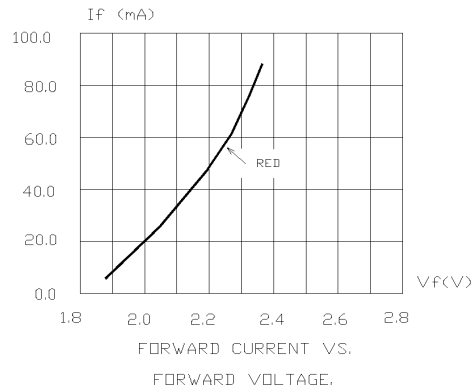
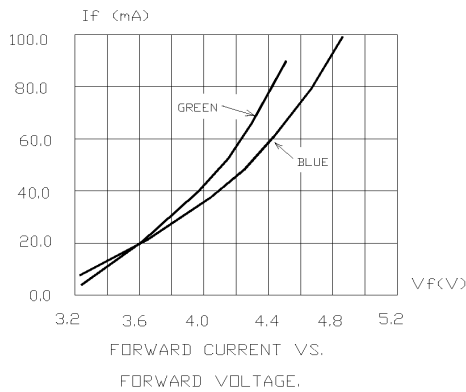
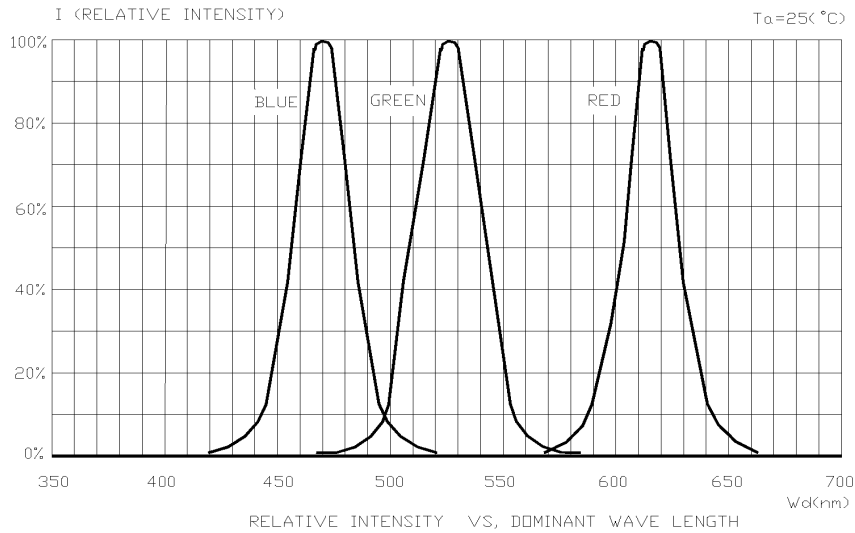
#### Maximum Ratings (Ta=25°C)

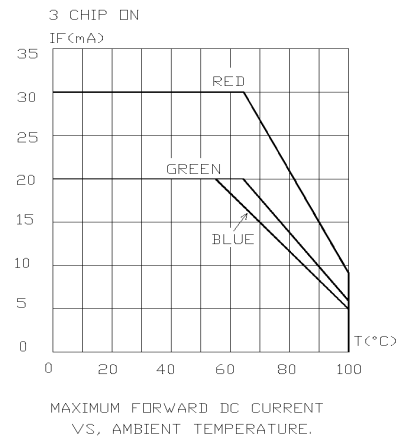
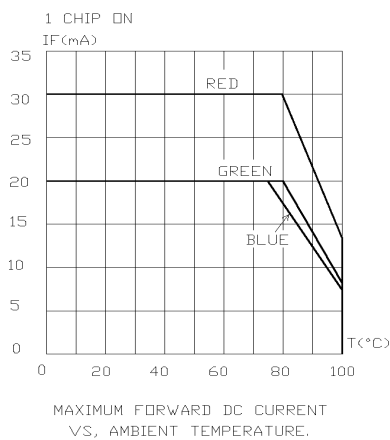
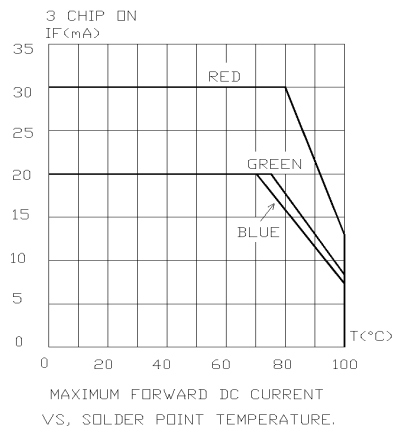
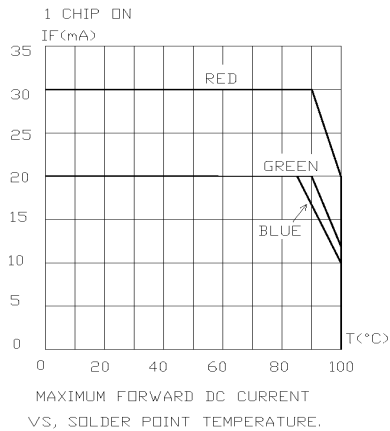
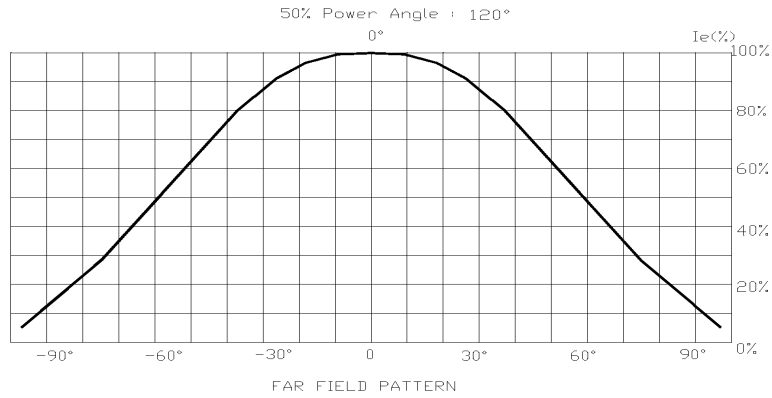
Characteristic	Symbol	Max.			Unit
		UHR	UBPG	UBL	
Forward Current	I <sub>F</sub>	30	20	20	mA
Reverse Voltage	V <sub>R</sub>	5	5	5	V
Power Dissipation	P <sub>D</sub>	150.00	120.00	100.00	mW
Operating Temperature	T <sub>opr</sub>	-40 ~ +100	-40 ~ +100	-40 ~ +100	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	-40 ~ +100	-40 ~ +100	°C
Soldering Temperature	T <sub>sol</sub>	260	260	260	°C
Soldering Time	-	for 5 sec. max	for 5 sec. max	for 5 sec. max	-

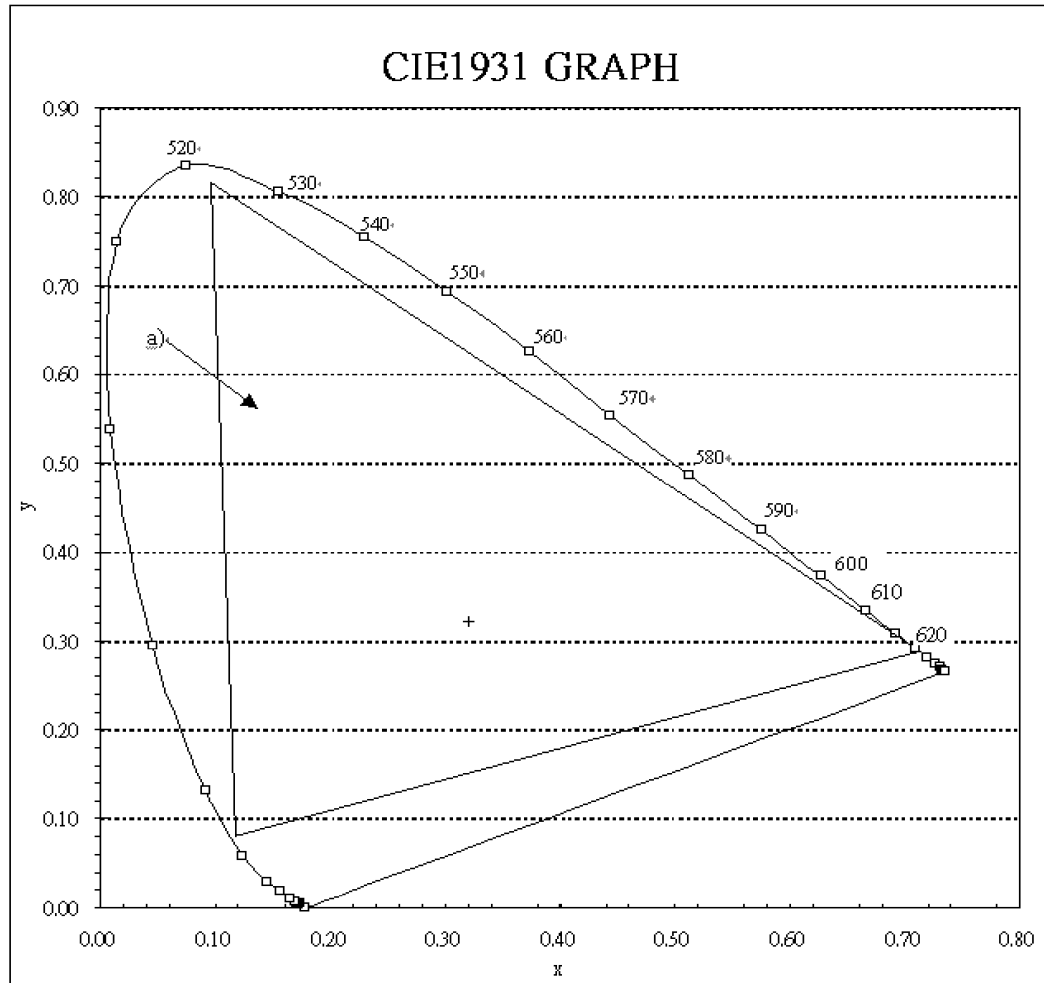


#### Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min			Typ			Max			Unit
			UHR	UBPG	UBL	UHR	UBPG	UBL	UHR	UBPG	UBL	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	-	-	-	2.00	3.60	3.60	2.50	4.20	4.20	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	-	-	-	-	10	10	10	μA
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> =20mA	90.00	140.00	36.00	160.00	224.00	55.00	-	-	-	mcd
Viewing Angle	2θ <sup>1/2</sup>	-	-	-	-	120°	120°	120°	-	-	-	deg.
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> =20mA	-	-	-	623	520	465	-	-	-	nm
Dominant Wavelength	λ <sub>d</sub>	I <sub>F</sub> =20mA	-	-	-	613	525	470	-	-	-	nm
Spectral Line Half Width	Δλ	I <sub>F</sub> =20mA	-	-	-	15	38	28	-	-	-	nm







the color coordinates of the mixed light can be expected within the area of the color triangle marked a).

the achromatic point ( $x=0.33,y=0.33$ ) is marked "+"