1.SPECIFICATIONS

(1) Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I_F	30	mA
Pulse Forward Current	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	120	mW
Operating Temperature	T_{opr}	-30 ~ + 85	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Soldering Temperature	T_{sld}	265°C for 10sec.	

I_{FP} Conditions : Pulse Width ≦ 10msec. and Duty ≦ 1/10

(2) Initial Electrical/Optical Characteristics (Ta=25°C)

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage		V_F	I_F=20[mA]	-	3.6	4.0	V
Reverse Current		I_R	V_R= 5[V]	-	-	50	μA
Luminous Intensity	Rank T	Iv	I_F=20[mA]	11000	12600	15500	mcd
	Rank S	Iv	I_F=20[mA]	7800	9200	11000	mcd
	Rank R	Iv	I_F=20[mA]	5520	6400	7800	mcd

* Luminous Intensity Measurement allowance is ± 10%.

Color Ranks (I_F=20mA,Ta=25°C)

	Rank a0			
x	0.280	0.264	0.283	0.296
y	0.248	0.267	0.305	0.276

	Rank b1			
x	0.287	0.283	0.330	0.330
y	0.295	0.305	0.360	0.339

	Rank b2			
x	0.296	0.287	0.330	0.330
y	0.276	0.295	0.339	0.318

	Rank c0			
x	0.330	0.330	0.361	0.356
y	0.318	0.360	0.385	0.351

* Color Coordinates Measurement allowance is ± 0.01.

* One delivery will include up to two consecutive color ranks and three luminous intensity ranks of the products. The quantity-ratio of the ranks is decided by Nichia.

2.TYPICAL INITIAL OPTICAL/ELECTRICAL CHARACTERISTICS

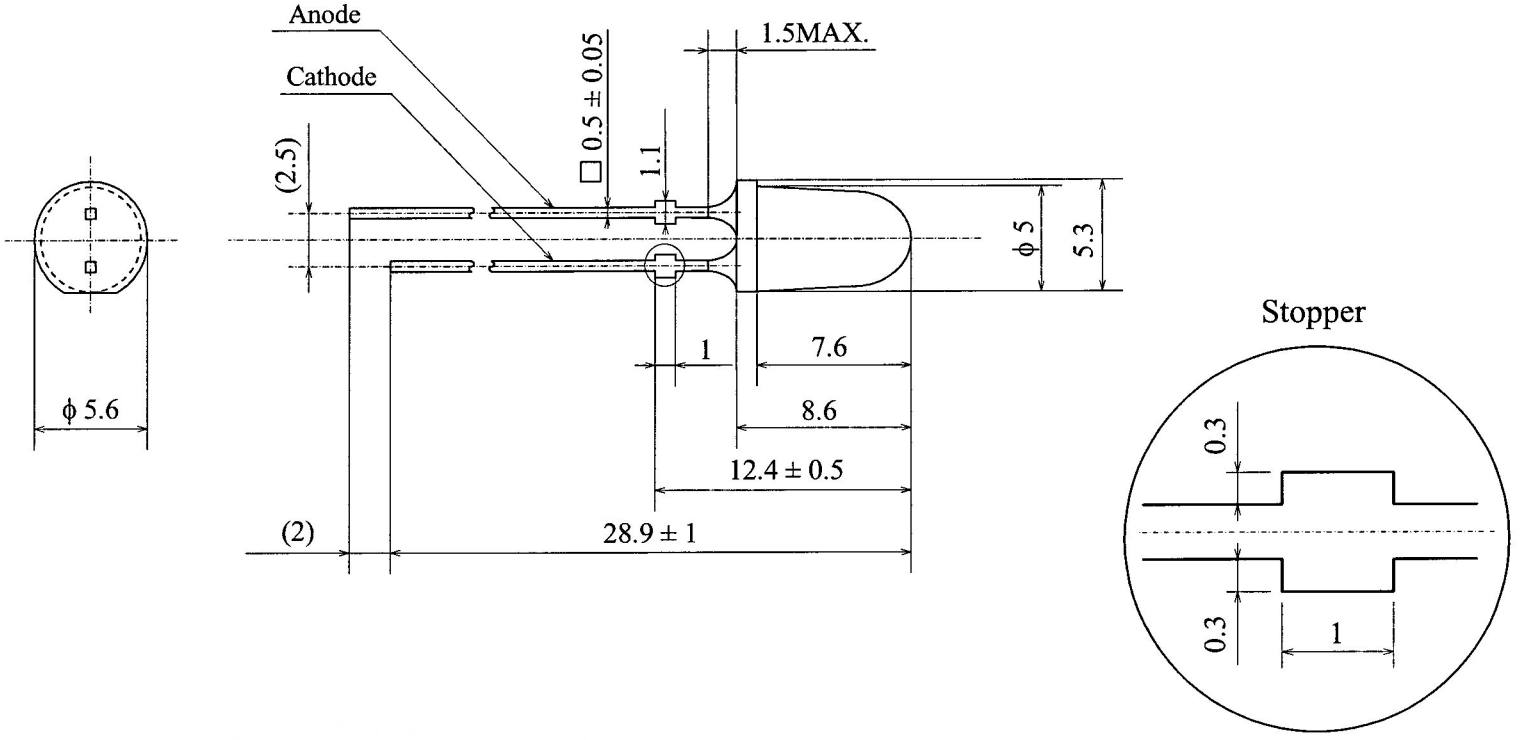
Please refer to figure's page.

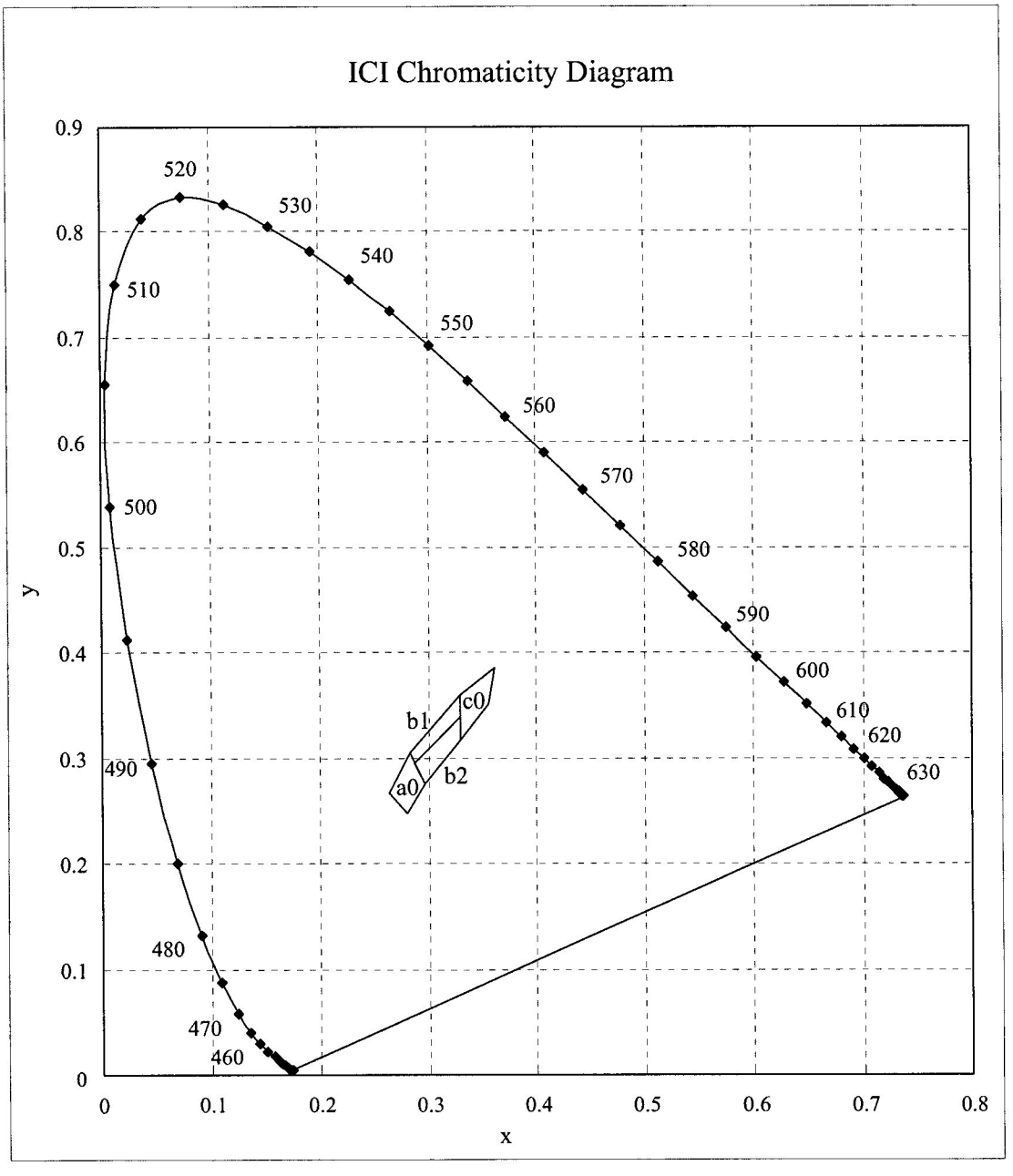
3.OUTLINE DIMENSIONS AND MATERIALS

Please refer to figure's page.

Material as follows ; Resin(Mold) : Epoxy Resin (over YAG Phosphor)

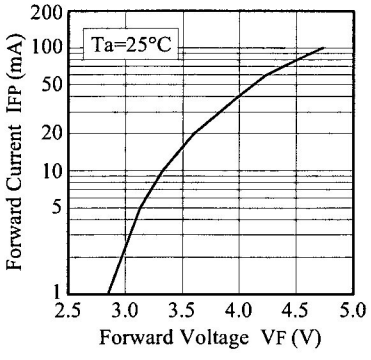
Leadframe : Ag plating Copper Alloy


Anode
Cathode
(2.5)
□ 0.5 ± 0.05
1.1
1.5MAX.
ϕ 5
5.3
ϕ 5.6
1
7.6
8.6
12.4 ± 0.5
(2)
28.9 ± 1
Stopper
0.3
0.3
1

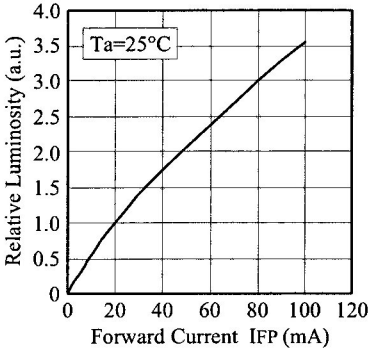


* Color Coordinates Measurement allowance is ± 0.01.

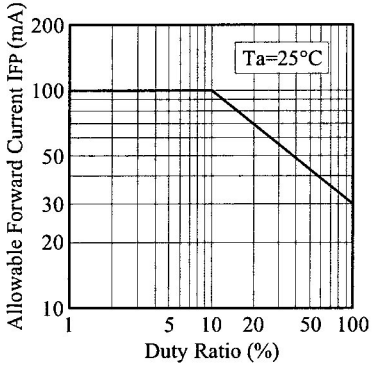
■ Forward Voltage vs. Forward Current



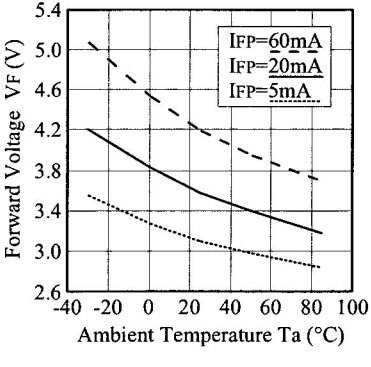
■ Forward Current vs. Relative Luminosity



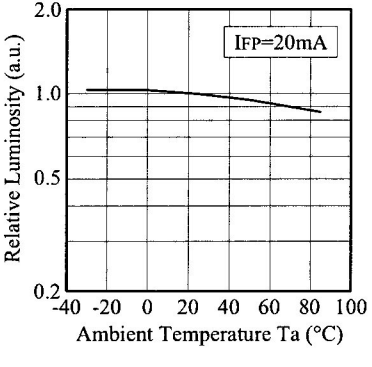
■ Duty Ratio vs. Allowable Forward Current



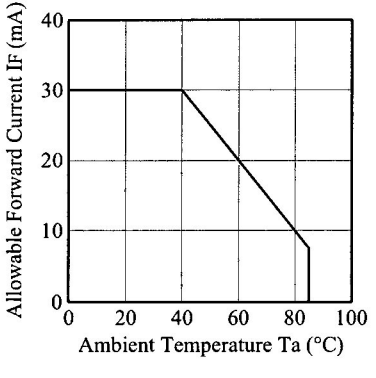
■ Ambient Temperature vs. Forward Voltage



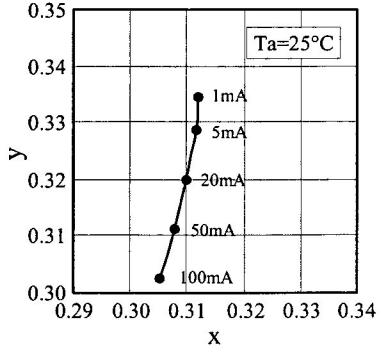
■ Ambient Temperature vs. Relative Luminosity



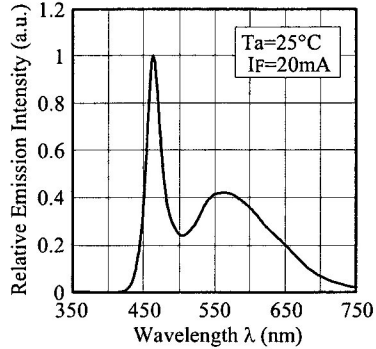
■ Ambient Temperature vs. Allowable Forward Current



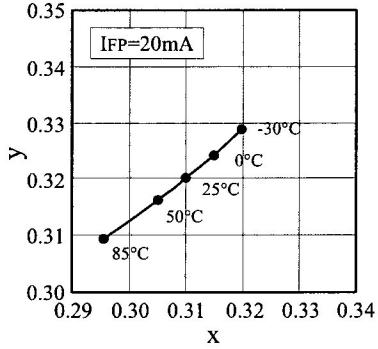
■ Forward Current vs. Chromaticity diagram



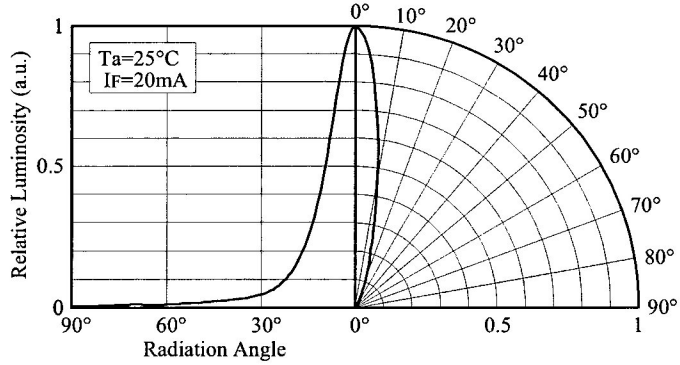
■ Spectrum



■ Ambient Temperature vs. Chromaticity diagram



■ Directivity (NSPW500B(S))



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