

# DIS-1148-1AG

## Aqua Green

5mm, Cylindrical, 5.3mm Height  
125° viewing angle

DWG BY:  
BL / GP  
09-22-06

CHK BY:  
PL  
10-17-08

REVISION LTR: -  
10-15-08

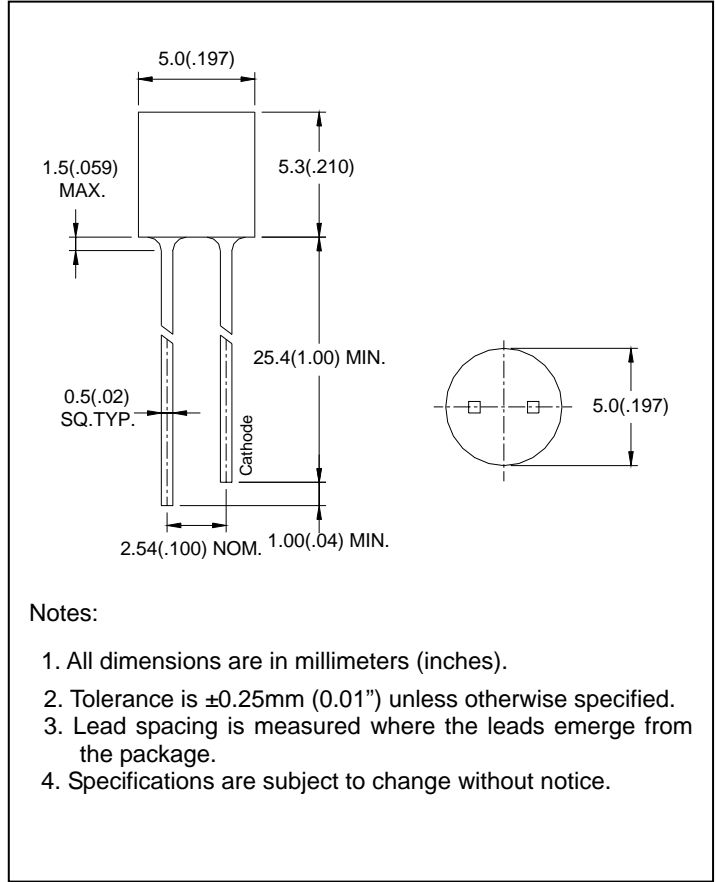
● **Features:**

1. Chip material: AlInGaN
2. Emitted color : Green
3. Lens Appearance : Water Clear
4. Cylindrical shape.
5. Low power consumption.
6. Compatible
7. Long life solid state reliability.
8. This product is RoHS compliant.

● **Applications:**

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

● **Package dimensions**



● **Absolute Maximum Ratings(Ta=25°C)**

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	120	mW
Forward Current	I <sub>F</sub>	30	mA
Peak Forward Current* <sup>1</sup>	I <sub>FP</sub>	150	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	Topr	-40°C ~80°C	
Storage Temperature	Tstg	-40°C ~85°C	
Soldering Temperature	Tsol	260°C (for 5 seconds)	

\*<sup>1</sup>Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1msec width.

● **Electrical and optical characteristics(Ta=25°C)**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20mA$	-	3.5	4.0	V
Luminous Intensity	$I_v$	$I_F=20mA$	-	275	-	mcd
Reverse Current	$I_R$	$V_R=5V$	-	-	100	$\mu A$
Peak Wave Length	$\lambda_p$	$I_F=20mA$	-	516	-	nm
Dominant Wave Length	$\lambda_d$	$I_F=20mA$	-	524	-	nm
Spectral Line Half-width	$\Delta \lambda$	$I_F=20mA$	-	36	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	-	125	-	deg
Radiant Intensity		$I_F=20mA$	-	-	-	mW/sr
Chromaticity Coordinates	X	$I_F=20mA$	-	0.16	-	
	Y		-	0.71	-	

● **Typical electro-optical characteristics curves**

Fig.1 Relative intensity vs. Wavelength

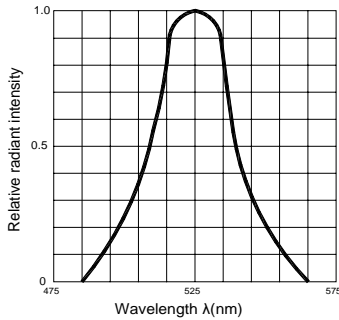


Fig.2 Forward current derating curve vs. Ambient temperature

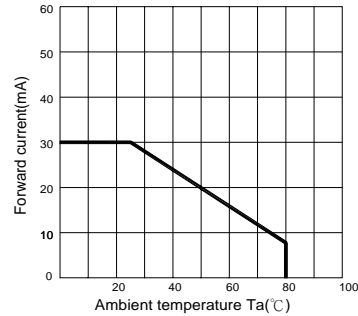


Fig.3 Forward current vs. Forward voltage

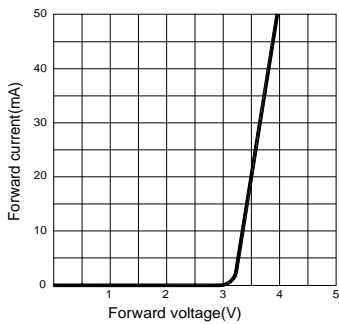


Fig.4 Relative luminous intensity vs. Ambient temperature

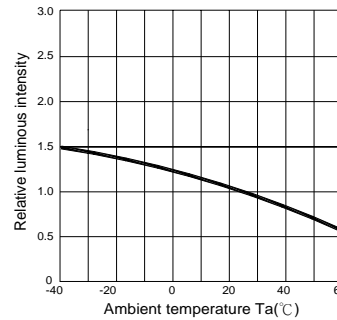


Fig.5 Relative luminous intensity vs. Forward current

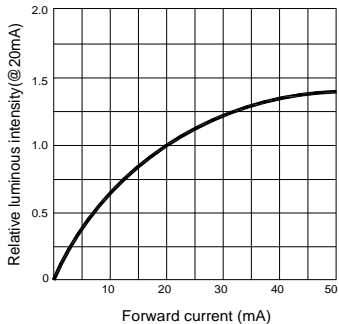
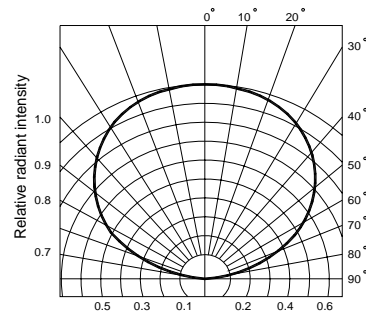


Fig.6 Radiation diagram



● **Bin Limits**

1. Intensity Bin Limits (At  $I_F=20\text{mA}$ )

<b>Bin Code</b>	<b>Min. (mcd)</b>	<b>Max. (mcd)</b>
:	:	:
P	55	110
Q	82	160
R	120	240
S	180	360
T	280	550
:	:	:

2. Color Bin Limits (At  $I_F=20\text{mA}$ ) : Dominant Wave Length  $\lambda_d(\text{nm})$

<b>Bin Code</b>	<b>Min. (nm)</b>	<b>Max. (nm)</b>
6	519	526
7	524	531

