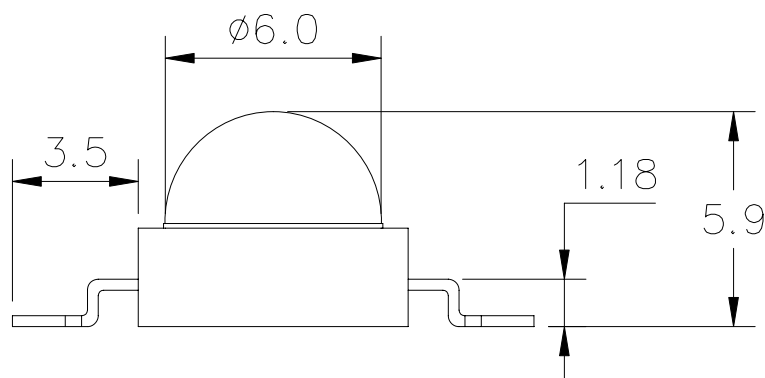
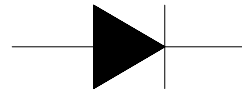
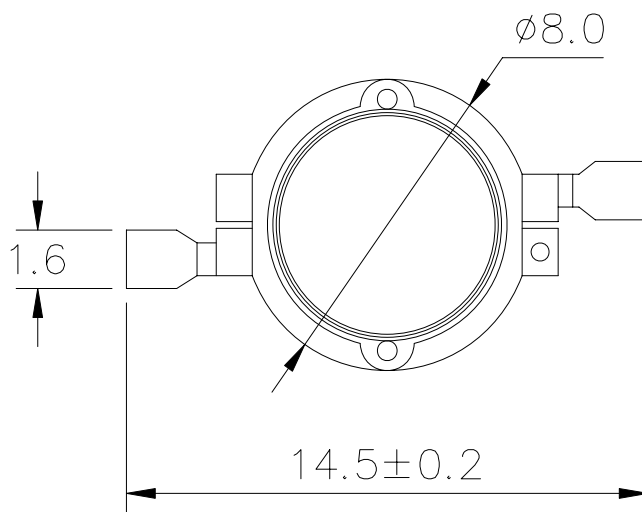


**■ Package Dimension:**

| Part NO.     | Housing | Emitting Color | Lens Color  |
|--------------|---------|----------------|-------------|
| AL-6R01WC-60 | ----    | Red-Orange     | Water Clear |

**Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$ mm (.010") unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.
6. This data-sheet only valid for six months.

**■ Absolute Maximum Ratings at Ta=25°C**

| Parameter                    | Symbol          | MAX.       | Unit    |
|------------------------------|-----------------|------------|---------|
| Forward Current              | I <sub>F</sub>  | 350        | mA      |
| Peak pulsed forward current  | I <sub>PF</sub> | 500        | mA      |
| Power Dissipation            | P <sub>D</sub>  | 1          | W       |
| Reverse Voltage              | V <sub>R</sub>  | 5          | V       |
| Operating Temperature Range  | Topr            | -40 to +85 | °C      |
| Storage Temperature Range    | Tstg            | -40 to +85 | °C      |
| Soldering Temperature (Max.) | Tsol            | 260 ± 5    | seconds |

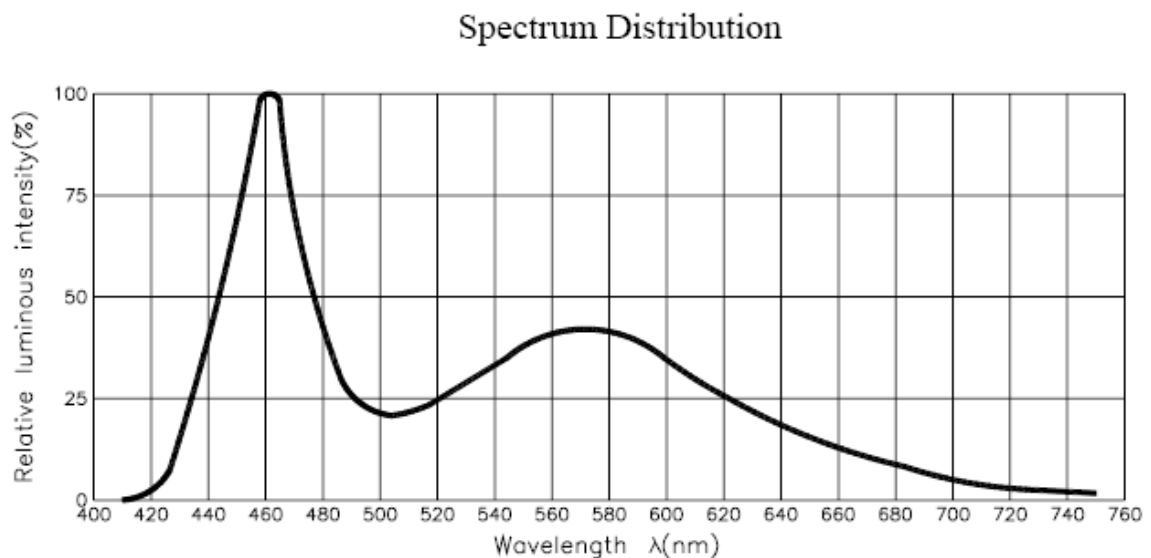
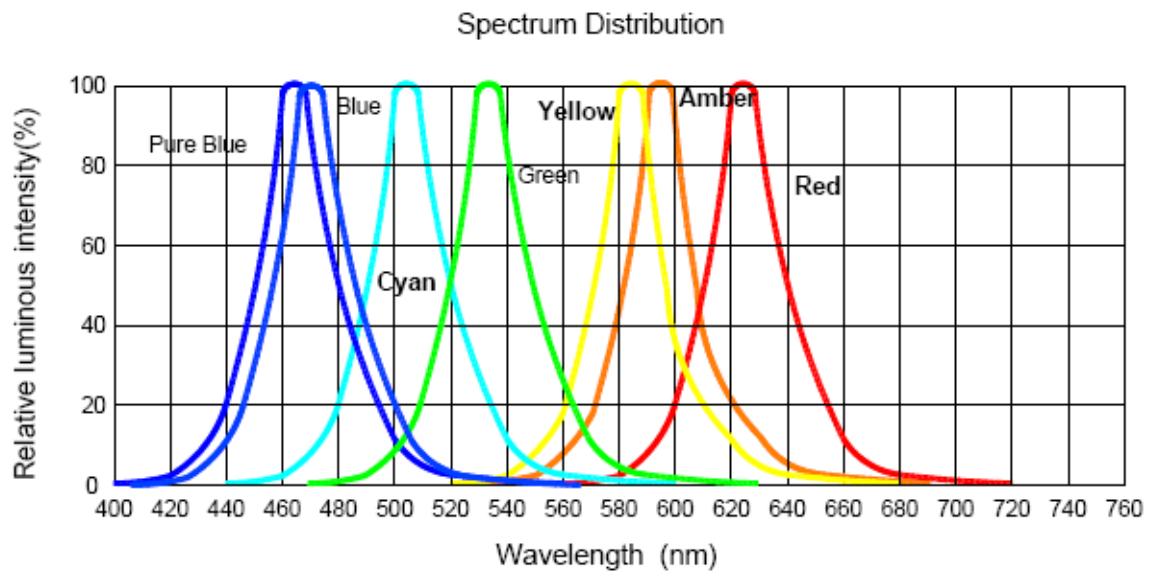
**■ Electrical Optical Characteristics at Ta=25°C**

| Parameter                                      | Symbol                          | Min. | Typ. | Max. | Unit  | Test Condition        |
|------------------------------------------------|---------------------------------|------|------|------|-------|-----------------------|
| Luminous Flux                                  | Flux                            | 30   | 40   | ---  | Lm    | I <sub>F</sub> =350mA |
| Forward Voltage                                | V <sub>F</sub>                  | 2.0  | 2.5  | 3.0  | V     | I <sub>F</sub> =350mA |
| Dominant Wavelength                            | $\lambda_d$                     | 610  | 615  | 620  | nm    | I <sub>F</sub> =350mA |
| Spectral Half-Width                            | $\Delta \lambda_{1/2}$          | ---  | 20   | ---  | nm    | I <sub>F</sub> =350mA |
| Temperature Coefficient or Dominant Wavelength | $\Delta \lambda_d / \Delta T_j$ | ---  | 0.05 | ---  | nm/°C | I <sub>F</sub> =350mA |
| Temperature Coefficient of V <sub>F</sub>      | $\Delta V_F / \Delta T_j$       | ---  | -2.0 | ---  | mV/°C | I <sub>F</sub> =350mA |
| Thermal Resistance Junction to Board           | ----                            | ---  | 15   | ---  | °C/W  | I <sub>F</sub> =350mA |
| Viewing Angle                                  | 2 $\theta_{1/2}$                | ---  | 60   | ---  | Deg   | I <sub>F</sub> =350mA |

**■ Reliability test items and conditions :**

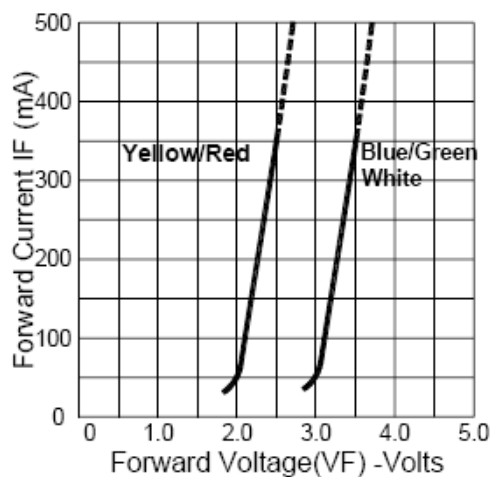
| NO | ITEM                                | Test Conditions                                         | Test hours/cycle | Sample Q'ty | Ac/Re |
|----|-------------------------------------|---------------------------------------------------------|------------------|-------------|-------|
| 1  | Solder Heat                         | Temp : 260°C±5°C                                        | 5 sec            | 30 pcs      | 0/1   |
| 2  | Temperature Cycle                   | -40°C 30min<br>-25°C 5min<br>-105°C 30min<br>-25°C 5min | 100 cycles       | 30 pcs      | 0/1   |
| 3  | Thermal Shock                       | -40°C 5min<br>-105°C 5min                               | 20 cycles        | 30 pcs      | 0/1   |
| 4  | High Temperature Storage            | Temp : 85°C                                             | 1000 hrs         | 30 pcs      | 0/1   |
| 5  | Low Temperature Storage             | Temp : -35°C                                            | 1000 hrs         | 30 pcs      | 0/1   |
| 6  | DC Operating Life                   | I <sub>F</sub> =350mA                                   | 1000 hrs         | 30 pcs      | 0/1   |
| 7  | High Temperature /<br>High Humidity | Ta=60°C<br>R.H 90%                                      | 1000 hrs         | 30 pcs      | 0/1   |

■ Typical electro-optical characteristics curves :

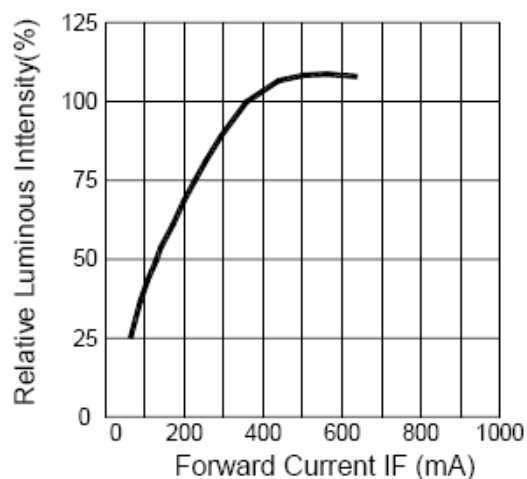


■ Typical electro-optical characteristics curves :

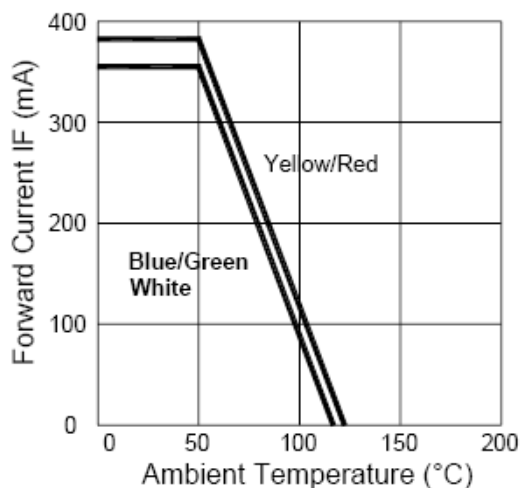
Forward Current VS. Forward Voltage



Luminous Intensity VS. Forward Current



Forward Current VS. Ambient Temperature



Radiation Diagram

