

# VISIBLE LIGHT PRODUCTS

(Super White Light Emitting Diode)

REV:C  
DATE:2005/4/20

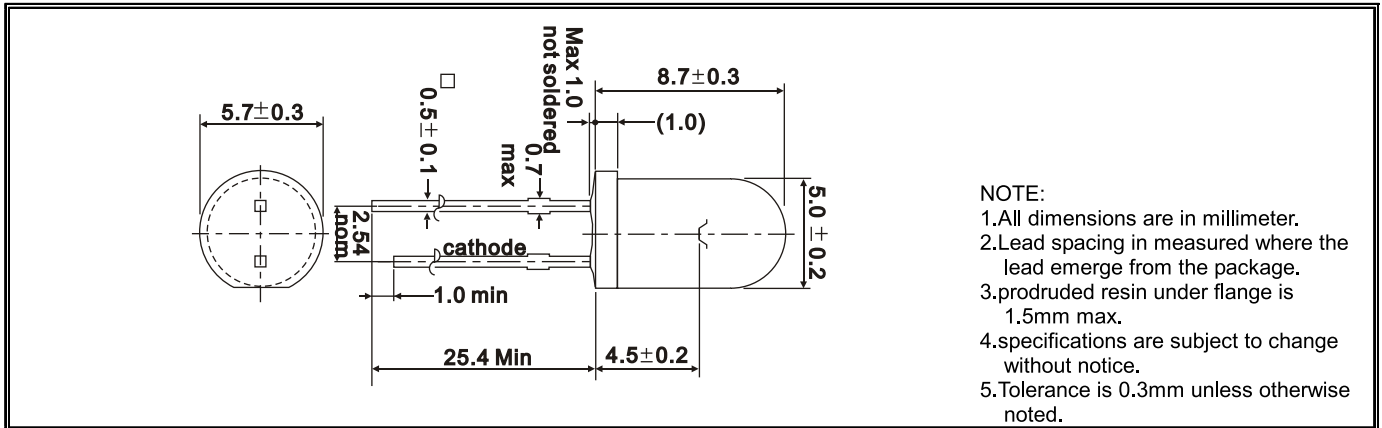
ESD Products ! Class I

DEVICE NO:HB5-439AWCA-C

LENS COLOR:

|                   |                     |                 |   |             |
|-------------------|---------------------|-----------------|---|-------------|
| colored diffusion | colored transparent | white diffusion | ✓ | water clear |
|-------------------|---------------------|-----------------|---|-------------|

PACKAGE DIMENSIONS:



ABSOLUTE MAXIMUM RATINGS:

TA=25°C

| PARAMETER                  | SYMBOL | MAX. RATING | UNIT |
|----------------------------|--------|-------------|------|
| Power Dissipation          | Pd     | 120         | mW   |
| Continuous Forward Current | IF     | 20          | mA   |
| Peak Forward Current *1    | IFM    | 100         | mA   |
| Reverse Voltage            | VR     | 4           | V    |
| LED Junction Temperature   | Tj     | 100         | °C   |
| Operating Temperature      | Topr   | -25 ~ +85   | °C   |
| Storage Temperature        | Tstg   | -40 ~ +100  | °C   |

Lead Soldering Temperature (1.6mm from case Bottom 260 °C for 5 seconds)

ELECTRIC-OPTICAL CHARACTERISTICS:

TA=25°C

| PARAMETER                    | SYMBOL  | TEST CONDITION | MIN  | TYP  | MAX | UNIT   |
|------------------------------|---------|----------------|------|------|-----|--------|
| View Angle of Half Power     | 2θ1/2   | IF=20mA        |      | 43   |     | Degree |
| Forward Voltage              | VF      | IF=20mA        |      | 3.6  | 4.2 | V      |
| Reverse Current              | IR      | VR=4V          |      |      | 60  | uA     |
| Luminous Intensity *2        | IV      | IF=20mA        | 2000 | 4200 |     | mcd    |
| Chromaticity Coordinates     | x       | IF=20mA        |      | 0.30 |     |        |
|                              | y       | IF=20mA        |      | 0.32 |     |        |
| Dominate Wave Length *3      | λd(HUE) | IF=20mA        |      | ---  |     | nm     |
| Spectrum Width of Half Valve | Δλ      | IF=20mA        |      | ---  |     | nm     |

\*1.Duty Ratio=1/10,Pulse Width=0.1ms.

\*2.Tolerance:30% measuring equipment :EXELTRON 2001.

\*3.The dominate wavelength is derived from the CIE Chromaticity Diagram and represents the color of the device.

**HUEY JANN ELECTRONICS INDUSTRY CO., LTD.**