

# LD200-SIW-40D-LL

Warm White

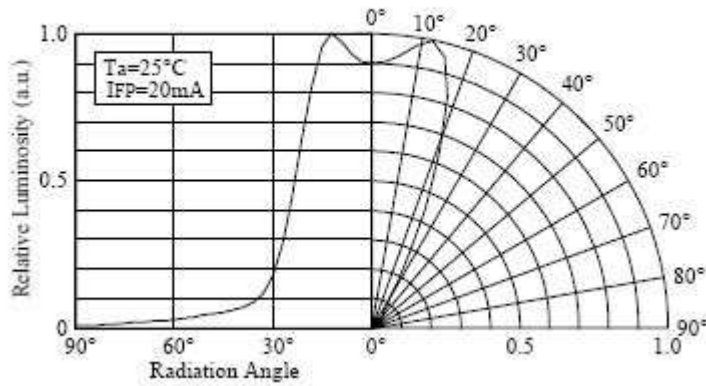
5mm, Domed, 8.6mm Height  
40° viewing angle

DWG BY:  
SG / GP  
11-19-09

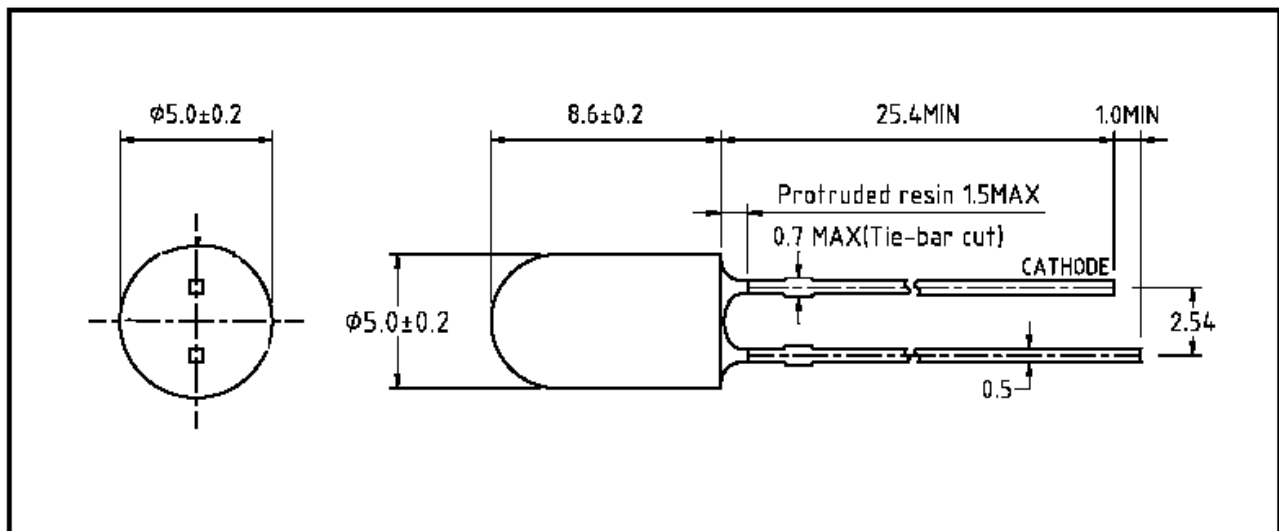
CHK BY:  
PL  
11-19-09

REVISION LTR: -  
  
11-19-09

**Beam Pattern**



**OUTLINE DIMENTIONS:**



**NOTES:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$  (0.01") mm unless otherwise noted.
3. Protruded resin under flange is 1.0mm (0.04") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.

**ABSOLUTE MAXIMUM RATING:**

(Ta=25°C)

| Item                  | Symbol | Absolute Maximum Rating | Unit  |
|-----------------------|--------|-------------------------|-------|
| Power Dissipation     | Pd     | 120                     | mW    |
| Pulse Forward Current | Ifp    | 150                     | mA    |
| Forward Current       | If     | 20                      | mA    |
| Derating Factor       | --     | 0.40                    | mA/ C |
| Reverse Voltage       | Vr     | 5                       | V     |
| Operating Temperature | Topr   | -30 -- +85              | °C    |
| Storage Temperature   | Tstg   | -40 -- +100             | °C    |
| Soldering Temperature | Tsld   | 265°C for 10 Sec        |       |

 Ifp Condition : Pulse Width  $\leq 10$  msec. Duty  $\leq 1/10$ 
**ELECTRICAL/OPTICAL CHARACTERISTICS**

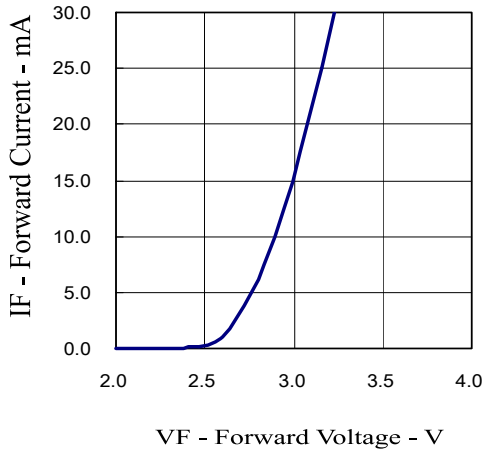
| Item                     | Symbol           | Condition | Typ.    | Max. | Unit  |    |
|--------------------------|------------------|-----------|---------|------|-------|----|
| Forward Voltage          | Vf               | If=20mA   | 3.2     | 3.5  | V     |    |
| Luminous Flux            | --               | If=20mA   | 5.0     | --   | lm    |    |
| Luminous Intensity       | Iv               | If=20mA   | 8000    | --   | mcd   |    |
| Viewing Angle            | 2 $\theta_{1/2}$ | If=20mA   | 40      | --   | deg   |    |
| SCP                      | --               | If=20mA   | 0.36    | --   | cd    |    |
| Radiant Intensity        | --               | If=20mA   | 27      | --   | mW/sr |    |
| Chromaticity Coordinate* | x                | --        | If=20mA | 0.43 | --    | -- |
|                          | y                | --        | If=20mA | 0.39 | --    | -- |

\* Please refer to CIE1931 chromaticity coordinate.

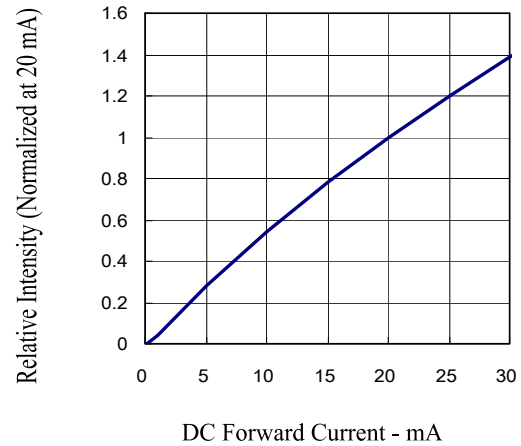
| Item              | Symbol | Condition | Min.  | Typ.  | Max.  | Unit |
|-------------------|--------|-----------|-------|-------|-------|------|
| Color Temperature | K      | If=20mA   | 2850K | 2950K | 3050K | --   |

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

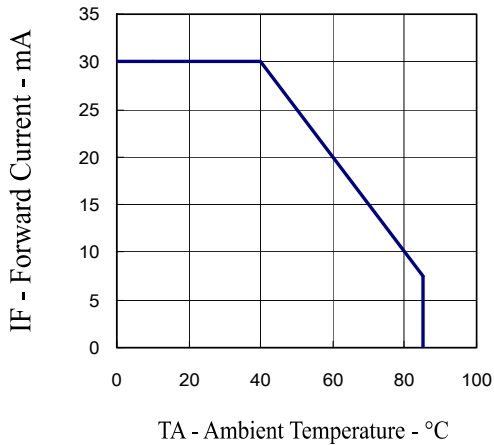
Forward Current vs. Forward Voltage



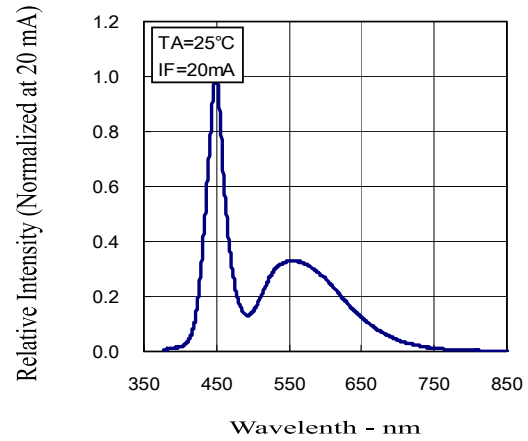
Relative Intensity vs. Forward Current



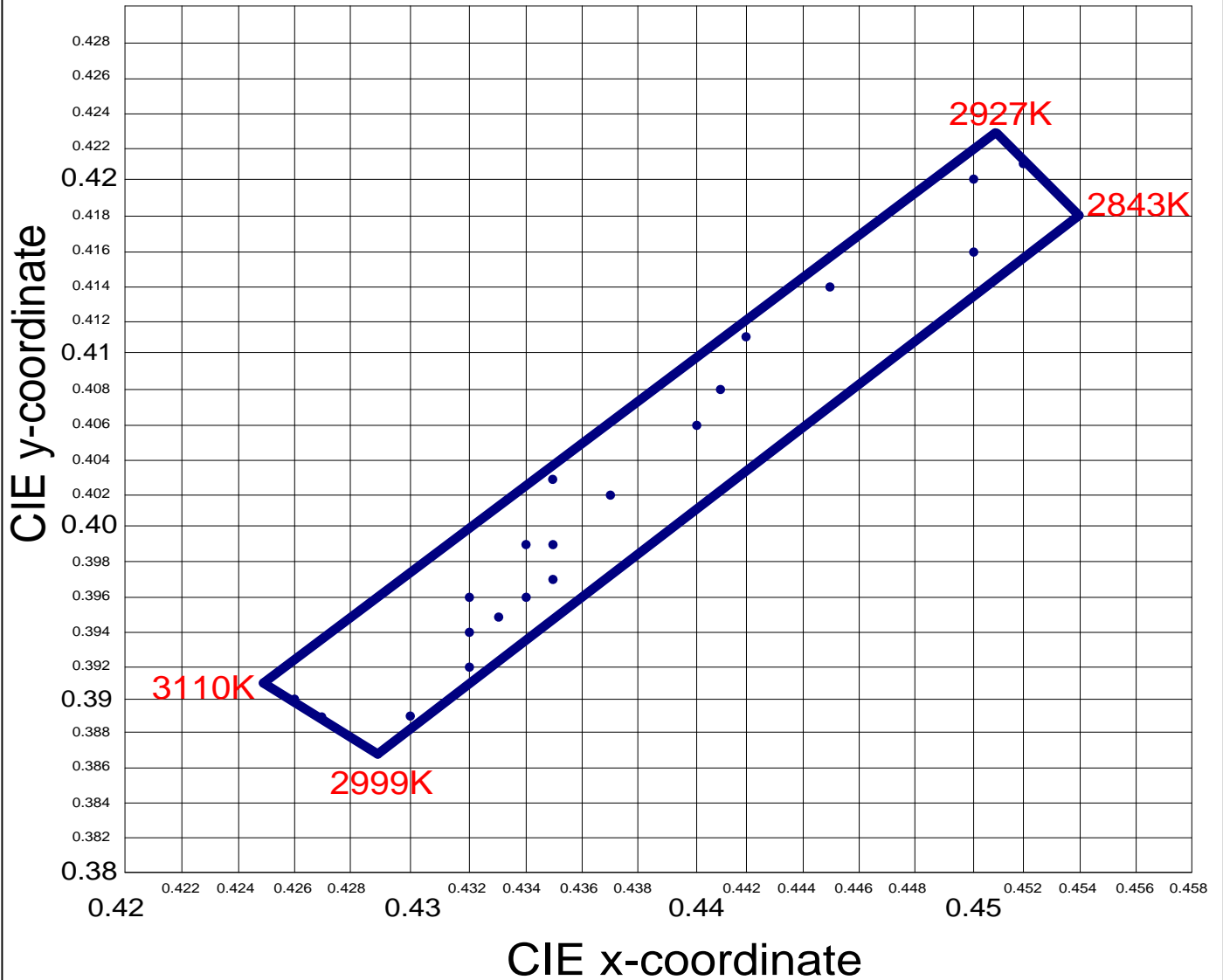
Forward Current vs. Ambient Temperature



Relative Intensity vs. Wavelength



### Color Bin Range



| Color Code | Bin Code |   |       | CCT   |       | CCT   |       | CCT   |       | CCT   |
|------------|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|
| SIW        | RANK A   | X | 0.429 | 2999K | 0.425 | 3110K | 0.451 | 2927K | 0.454 | 2843K |
|            |          | Y | 0.387 |       | 0.391 |       | 0.423 |       | 0.418 |       |
|            | -        | X | -     | -     | -     | -     | -     | -     | -     | -     |
|            |          | Y | -     | -     | -     | -     | -     | -     | -     | -     |
|            | -        | X | -     | -     | -     | -     | -     | -     | -     | -     |
|            |          | Y | -     | -     | -     | -     | -     | -     | -     | -     |
|            | -        | X | -     | -     | -     | -     | -     | -     | -     | -     |
|            |          | Y | -     | -     | -     | -     | -     | -     | -     | -     |