



**ABSOLUTE MAXIMUM RATINGS AT TA=25°C**

| PARAMETER                                              | MAXIMUM RATING      | UNIT |
|--------------------------------------------------------|---------------------|------|
| Power Dissipation                                      | 150                 | mW   |
| Peak Forward Current (300pps, 10 $\mu$ s pulse)        | 2                   | A    |
| Continuous Forward Current                             | 100                 | mA   |
| Reverse Voltage                                        | 5                   | V    |
| Operating Temperature Range                            | -40°C to + 85°C     |      |
| Storage Temperature Range                              | -55°C to + 100°C    |      |
| Lead Soldering Temperature<br>[1.6mm(.063") From Body] | 260°C for 5 Seconds |      |

**ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C**

| PARAMETER                  | SYMBOL           | MIN. | TYP. | MAX.  | UNIT               | TEST CONDITION        | BIN NO. |
|----------------------------|------------------|------|------|-------|--------------------|-----------------------|---------|
| Aperture Radiant Incidence | E <sub>e</sub>   | 0.44 |      | 0.96  | mW/cm <sup>2</sup> | I <sub>F</sub> = 20mA | BIN A   |
|                            |                  | 0.64 |      | 1.20  |                    |                       | BIN B   |
|                            |                  | 0.80 |      | 1.68  |                    |                       | BIN C   |
|                            |                  | 1.12 |      |       |                    |                       | BIN D   |
| Radiant Intensity          | I <sub>E</sub>   | 3.31 |      | 7.22  | mW/sr              | I <sub>F</sub> = 20mA | BIN A   |
|                            |                  | 4.81 |      | 9.02  |                    |                       | BIN B   |
|                            |                  | 6.02 |      | 12.63 |                    |                       | BIN C   |
|                            |                  | 8.42 |      |       |                    |                       | BIN D   |
| Peak Emission Wavelength   | $\lambda_{Peak}$ |      | 940  |       | nm                 | I <sub>F</sub> = 20mA |         |
| Spectral Line Half-Width   | $\Delta \lambda$ |      | 50   |       | nm                 | I <sub>F</sub> = 20mA |         |
| Forward Voltage            | V <sub>F</sub>   |      | 1.2  | 1.6   | V                  | I <sub>F</sub> = 20mA |         |
| Reverse Current            | I <sub>R</sub>   |      |      | 100   | $\mu$ A            | V <sub>R</sub> = 5V   |         |
| Viewing Angle (See FIG.6)  | 2 $\theta_{1/2}$ |      | 40   |       | deg.               |                       |         |

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

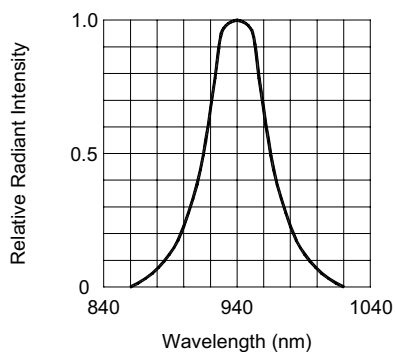


FIG.1 SPECTRAL DISTRIBUTION

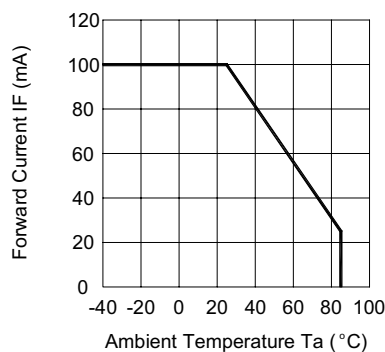


FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

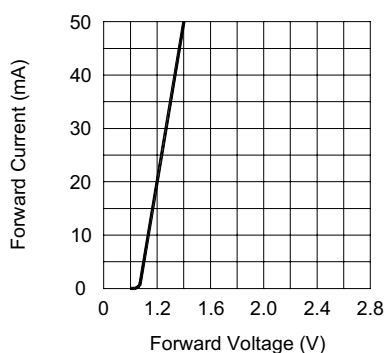


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

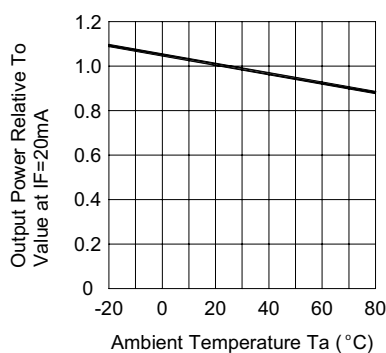


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

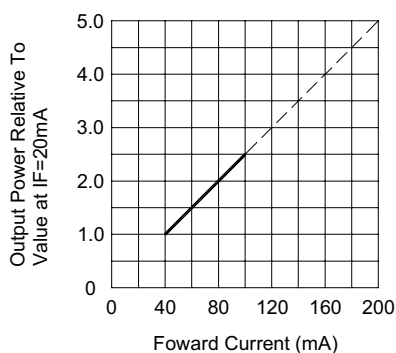


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

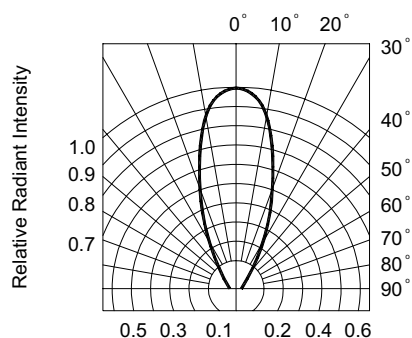


FIG.6 RADIATION DIAGRAM