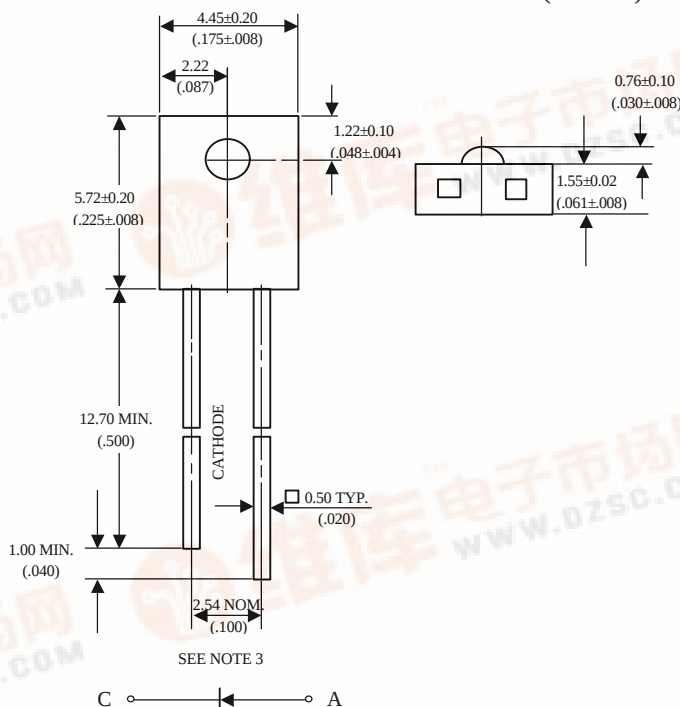


# MIE-114G1

## Package Dimensions

Unit: mm ( inches )

The MIE-114G1 provides a broad range of intensity selection .



## Features

- Selected to specific on-line intensity and radiant intensity ranges
- Low cost, plastic side looking package
- Mechanically and spectrally matched to

### The MID-11422 Phototransistor .

NOTES :

1. Tolerance is  $\pm 0.25$  mm (.010") unless otherwise noted.
2. Protruded resin under flange is 1.5 mm (.059") max.
3. Lead spacing is measured where the leads emerge from the package.

### Absolute Maximum Ratings

@ T<sub>A</sub>=25°C

| Parameter                   | Maximum Rating      |    |
|-----------------------------|---------------------|----|
| Power Dissipation           | 75                  | mW |
| Peak Forward Current        | 1                   | A  |
| Continuos Forward Current   | 50                  | mA |
| Reverse Voltage             | 5                   | V  |
| Operating Temperature Range | -55°C to + 100°C    |    |
| Storage Temperature Range   | -55°C to + 100°C    |    |
| Lead Soldering Temperature  | 260°C for 5 seconds |    |



## Optical-Electrical Characteristics

@  $T_A=25^{\circ}\text{C}$

| Parameter          | Test Conditions   | Symbol          | Min. | Typ . | Max. | Unit                    |
|--------------------|-------------------|-----------------|------|-------|------|-------------------------|
| Radiant Incidence  | $I_F=20\text{mA}$ | $E_e$           | -    | 0.6   | -    | $\text{mW}/\text{cm}^2$ |
| Forward Voltage    | $I_F=20\text{mA}$ | $V_F$           | -    | 1.25  | 1.40 | V                       |
| Reverse Current    | $V_R=5\text{V}$   | $I_R$           | -    | -     | 100  | $\mu\text{A}$           |
| Peak Wavelength    | $I_F=20\text{mA}$ | $\lambda$       | -    | 940   | -    | nm                      |
| Spectral Bandwidth | $I_F=20\text{mA}$ | $\Delta\lambda$ | -    | 50    | -    | nm                      |
| View Angle         | $I_F=20\text{mA}$ | $2\theta_{1/2}$ | -    | 80    | -    | deg .                   |

## Typical Optical-Electrical Characteristic Curves

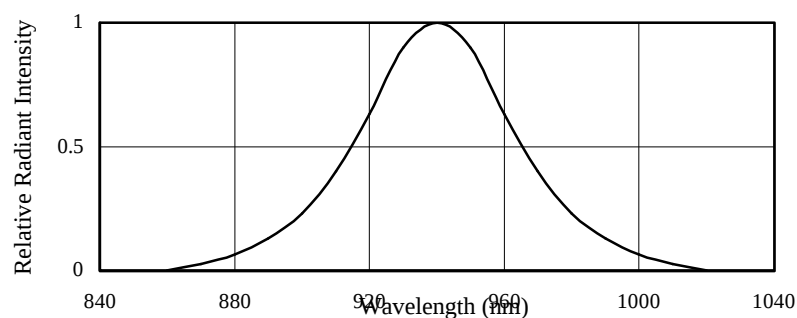


FIG.1 SPECTRAL DISTRIBUTION

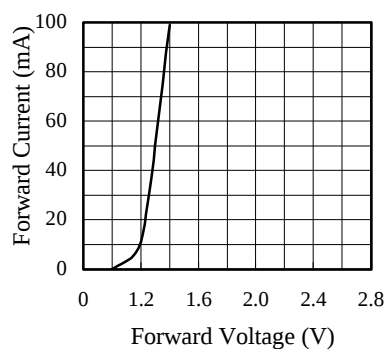


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

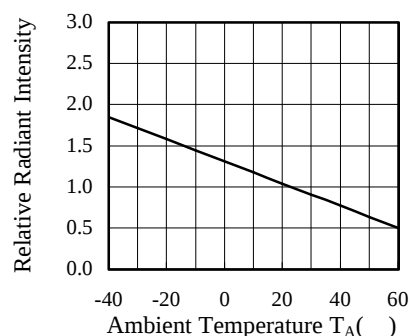


FIG.3 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

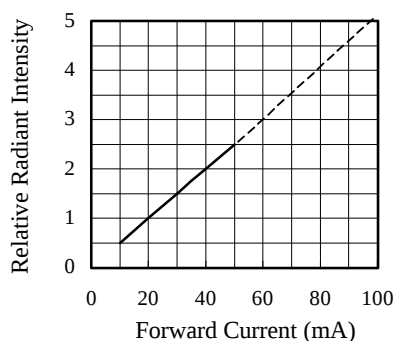


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

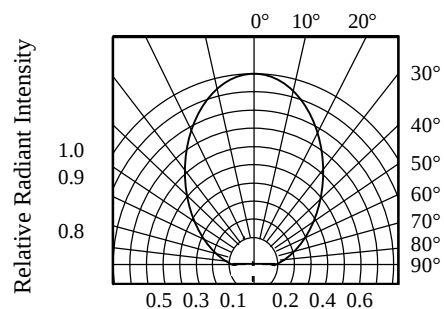


FIG.5 RADIATION DIAGRAM