

# Plastic Mold Infrared LEDs

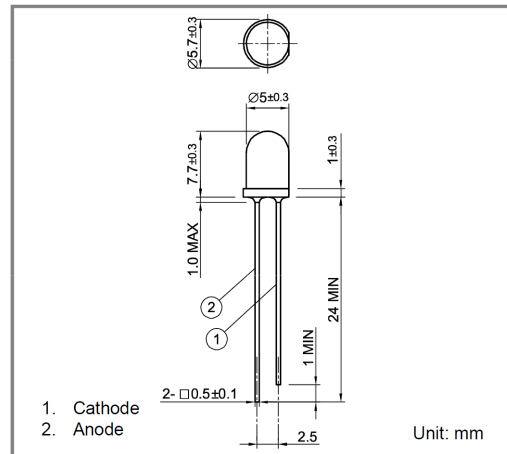
## KED862M51

### Features

- Transparent epoxy mold
- High power:22mW
- High speed response:25ns rise time
- Direct modulation

### Applications

- Available for wireless digital transmission
- Optical switches
- Optical encoders
- Optical instruments
- Automatic control apparatus



### Specifications

#### Absolute Maximum Ratings

| Parameter             | Symbol    | Value       | Unit | Conditions                            |
|-----------------------|-----------|-------------|------|---------------------------------------|
| Forward current       | $I_F$     | 100         | mA   |                                       |
| Peak forward current  | $I_{FP}$  | 1           | A    | Puls width=100 $\mu$ s, Duty ratio=1% |
| Reverse voltage       | $V_R$     | 5           | V    |                                       |
| Power dissipation     | $P_D$     | 150         | mW   |                                       |
| Operating temperature | $T_{opr}$ | -30 to +85  |      | Avoid dew condensation                |
| Storage temperature   | $T_{stg}$ | -30 to +100 |      | Avoid dew condensation                |
| Soldering temperature | $T_{sol}$ | 260         |      | Soldering time less than 5 seconds    |

#### Electrical and Optical characteristics

| Parameter            | Symbol | Value |      |     | Unit    | Conditions  |
|----------------------|--------|-------|------|-----|---------|-------------|
|                      |        | Min.  | Typ. | Max |         |             |
| Forward voltage      | $V_F$  |       | 1.5  | 1.8 | V       | $I_F=50$ mA |
| Reverse Current      | $I_R$  |       |      | 10  | $\mu$ A | $V_R=5$ V   |
| Optical output power | $P_O$  |       | 22   |     | mW      | $I_F=50$ mA |
| Peak wavelength      | $\rho$ |       | 865  |     | nm      | $I_F=50$ mA |
| Spectral width       |        |       | 40   |     | nm      | $I_F=50$ mA |
| Half angle           | 2      |       | 40   |     | deg     | $I_F=50$ mA |
| Rise time            | $t_r$  |       | 25   |     | ns      | $I_F=50$ mA |
| Fall time            | $t_f$  |       | 15   |     | ns      | $I_F=50$ mA |

