

## SPECIFICATION OF LED CHIP

C970-40

[INFRARED]

### 1) Commodity Type and Physical Characteristics.

- |                      |             |                  |            |
|----------------------|-------------|------------------|------------|
| 1. Material          | GaAs/GaAs   |                  |            |
| 2. Electrode         | Top Side    | P (anode) side   | : Au Alloy |
|                      | Bottom Side | N (cathode) side | : Au Alloy |
| 3. Electrode Pattern | Fig.1       |                  |            |
| 4. Chip Size         | Fig.2       |                  |            |
| 5. Chip Thickness    | Fig.2       |                  |            |
| 6. Emission Area     | Fig.2       |                  |            |

### 2) Electro-Optical Characteristics

| Parameters                   | Symbol         | Condition            | min. | typ. | max. | unit |
|------------------------------|----------------|----------------------|------|------|------|------|
| Forward Voltage              | V <sub>f</sub> | I <sub>f</sub> =20mA |      | 1.25 | 1.35 | V    |
| Reverse Current              | I <sub>r</sub> | V <sub>r</sub> =5V   |      |      | 10   | uA   |
| Power Intensity              | P <sub>o</sub> | I <sub>f</sub> =20mA | 0.5  | 1.0  |      | mW   |
| Peak Wavelength              | λ <sub>P</sub> | I <sub>f</sub> =20mA | 960  | 970  | 980  | nm   |
| Spectral Radiation Bandwidth | Δλ             | I <sub>f</sub> =20mA |      | 50   |      | nm   |
| RiseTime                     | t <sub>r</sub> | I <sub>f</sub> =20mA |      | 1000 |      | ns   |
| FallTime                     | t <sub>f</sub> | I <sub>f</sub> =20mA |      | 500  |      | ns   |

‡ Die shall be mounted on TO=18 gold header without resin coated.(T<sub>a</sub>=25°C)

[Unit : um]

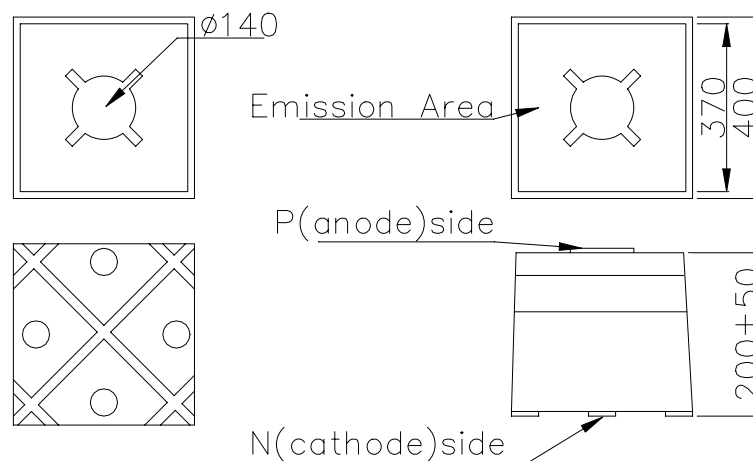


Fig.1 Electrode Pattern

Fig.2 Chip size and Emission Area