

## SPECIFICATION OF LED CHIP C850-40P [INFRARED]

### 1) Commodity Type and Physical Characteristics.

- |                      |                     |                  |            |
|----------------------|---------------------|------------------|------------|
| 1. Material          | GaAlAs/GaAlAs (DDH) |                  |            |
| 2. Electrode         | Top Side            | N (cathode) side | : Au Alloy |
|                      | Bottom Side         | P (anode) 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		1.5	1.7	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	2.5	4.0		mW
Peak Wavelength	λ <sub>P</sub>	I <sub>f</sub> =20mA	835	850	865	nm
Spectral Radiation Bandwidth	Δλ	I <sub>f</sub> =20mA		35		nm
RiseTime	t <sub>r</sub>	I <sub>f</sub> =20mA		80		ns
FallTime	t <sub>f</sub>	I <sub>f</sub> =20mA		60		ns

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

[Unit : um]

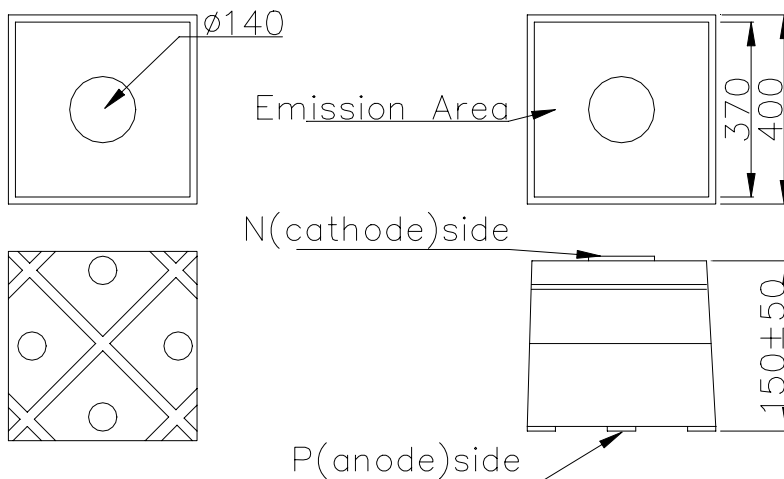


Fig.1 Electrode Pattern

Fig.2 Chip size and Emission Area