

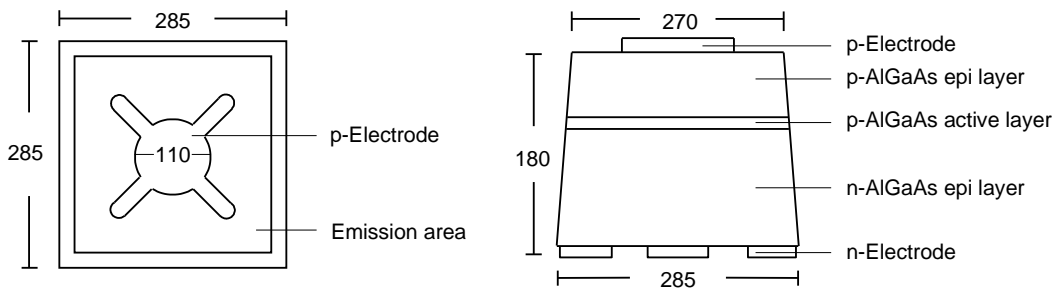
Features :

- AlGaAs/AlGaAs Wafer
- Very High Power
- High Speed
- High Performance
- Superior Thermal Stability

Typical Applications :

- IrDA
- Encoder
- Data Communication

Outline Dimensions : (Unit: um)



Physical Structure :

| | | |
|-------------------|-----------------------|-----------------|
| Chip dimension | Chip size | 285 um x 285 um |
| | Thickness | 180 um |
| | Emission area | 270 um |
| | Bonding pad | 110 um |
| Electrode | Top: P (anode) | Gold |
| | Backside: N (cathode) | Gold alloy |
| Surface condition | Frosted | |

Electro-Optical Characteristics : (Ta = 25°C)

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|-------------------------------|---------------------------------|-------------------------|------|---------|---------|------|
| Forward Voltage | V _F | I _F = 50 mA | - | 1.49 | 1.80 | V |
| | | I _F = 200 mA | - | 1.83 | 2.30 | |
| Reverse Voltage | V _R | I _R = 10 uA | 5 | - | - | V |
| Wavelength | λ _P | I _F = 50 mA | - | 850 | - | nm |
| Spectral width at half height | Δλ | I _F = 50 mA | - | 40 | - | nm |
| Radiant Power | P _o | I _F = 20 mA | 1.30 | - | - | mW |
| Rise / Fall Time | t _r / t _f | I _F = 50 mA | - | 25 / 15 | 35 / 35 | ns |

■ Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

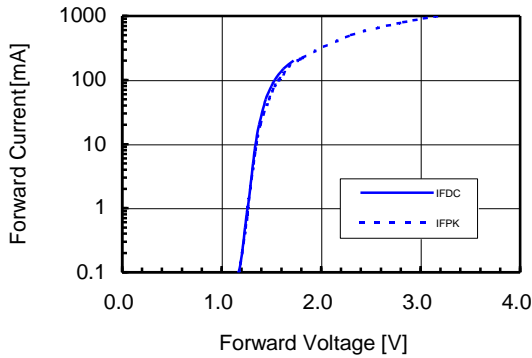


Fig 2. Relative Radiant Power vs. Wavelength

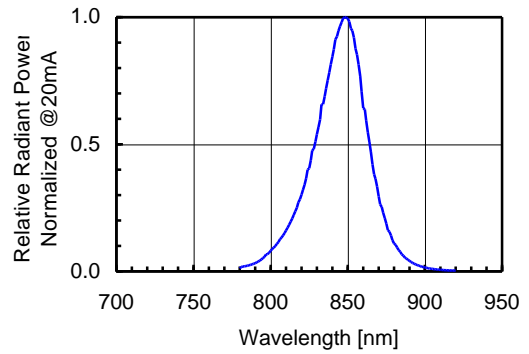


Fig 3. Relative Radiant Power vs. Forward DC Current

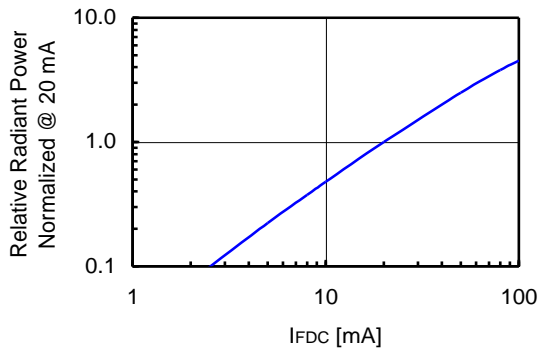


Fig 4. Relative Radiant Power vs. Forward Peak Current

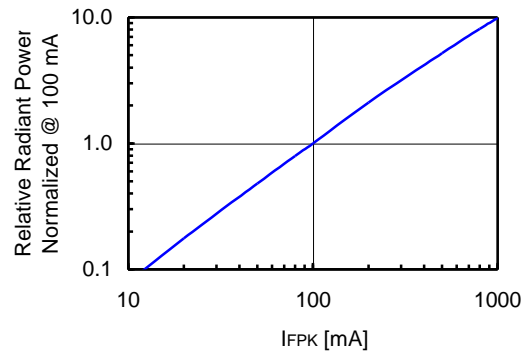


Fig 5. Forward DC Voltage vs. Temperature

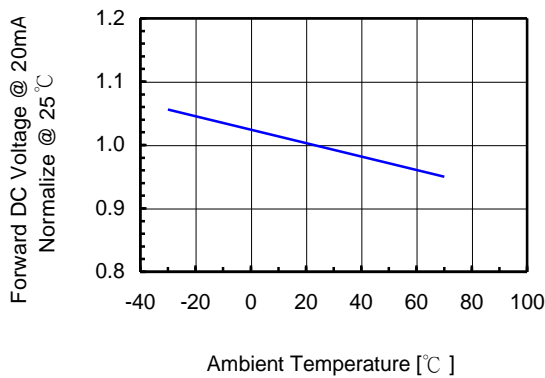


Fig 6. Relative Radiant Power vs. Temperature

