

THE SPECIFICATION OF AlGaAs IR LED CHIP "IR6JC"

1. DESCRIPTION

This is a AlGaAs infrared LED chip. It is N-side up. The peak wavelength is 870 nm (Typ.).

2. ELECTRO - OPTICAL CHARACTERISTICS (Ta=25deg. C)

| CONDITION | MIN. | TYP. | MAX. | UNIT |
|--|------|------|------|------|
| Forward Voltage (V_F) IF=20mA | 1.20 | 1.35 | 1.49 | V |
| Reverse Voltage (V_R) IR=10uA | 5 | | | V |
| Radiated Power ¹⁾ (P_o) IF=20mA | 4.0 | | | mW |
| Peak Wavelength (λ_p) IF=20mA | 860 | 870 | 900 | nm |
| Spectral Radiation Bandwidth ($\Delta\lambda$) IF=20mA | | 45 | | nm |
| Rise Time (T_r) IFp=500mA Tw=125ns,Duty=25% | | 15 | 35 | ns |
| Fall Time (T_f) IFp=500mA Tw=125ns,Duty=25% | | 20 | 35 | ns |
| PeakForward Voltage (VFm) IFp=400mA Tw=100us,Duty=10% | | 2.30 | 2.5 | V |

1) LED chip is mounted on TO-18 gold header without resin coated.

3. ABSOLUTE MAXIMUM RATINGS

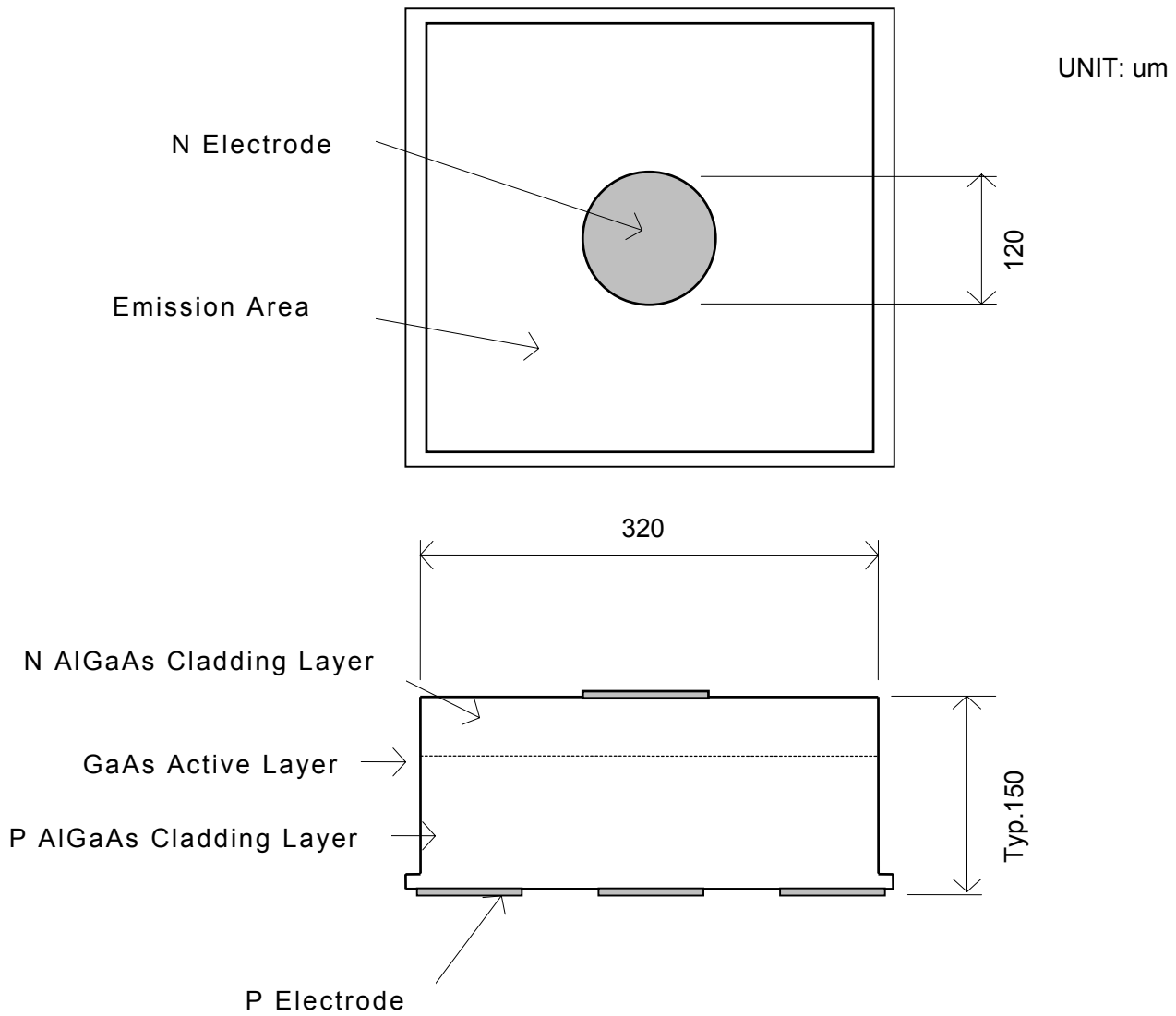
| | |
|------------------------------------|---------------------|
| Continuous Maximum Forward Current | : 100 mA(DC) |
| Reverse Voltage | : 5 V(IR=10uA) |
| Storage Temperature | |
| while on mylar membrane | : 0 to 40 deg. C |
| after removal from mylar membrane | : -40 to 100 deg. C |

4. PHYSICAL CHARACTERISTICS AND STRUCTURE

| | |
|-------------------------|---------------------------|
| 1)Material | : AlGaAs |
| 2)Structure | : Double Hetero Structure |
| 3)Junction Size | : 0.320mm × 0.320mm |
| 4)Thickness | : 0.150mm ± 0.040mm |
| 5)Bond Pad Size | : 0.120mm diameter |
| 6)Anode Metallization | : Gold Alloy |
| 7)Cathode Metallization | : Gold Alloy |

Physical Dimensions

Model IR6JC



Remark: This specification is for reference purpose only, and subject to change without prior notice.
Approved specification shall be obtained for the regular purchase.