



Apex Science & Eng. Corp.

(Optoelectronic Div.)

Surface Mounted Chip LED

Model No. : RY-SP172UDR24

Features :

- Compatible with automatic placement equipment
- Compatible with reflow solder process

Applications :

- Automotive_Telecommunication
- Indicators
- LCD Back-lights
- Illuminations

| | | |
|---------------|----------------|-------------|
| Dice Material | Light Color | Lens Color |
| AlGaInP | Ultra High Red | Water Clear |

Absolute Maximum Ratings

(Ta=25°C)

| Item | Symbol | Maximum | Unit |
|--|-----------------|------------|-------|
| Power Dissipation | P _D | 78 | mW |
| Continuous Forward Current | I _F | 30 | mA |
| Peak Forward Current (1/10 Duty Cycle 0.1ms Pulse Width) | I _{FP} | 100 | mA |
| Reverse Voltage | V _R | 5 | V |
| Derating Linear From 25°C | | 0.4 | mA/°C |
| Operating Temperature Range | Topr | -30 to +80 | °C |
| Storage Temperature Range | Tstg | -40 to +85 | °C |

Electrical / Optical Characteristics

(Ta=25°C)

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|--------------------------|----------------|-----------|------|------|------|------|
| Forward Voltage | V _F | IF=20mA | | 2.1 | 2.5 | V |
| Reverse Current | I _R | VR=5V | | | 10 | uA |
| Peak Emission Wavelength | λ _P | IF=20mA | | 655 | | nm |
| Dominant Wavelength | λ _D | IF=20mA | | 640 | | nm |
| Viewing Angle | 2θ 1/2 | IF=20mA | | 130 | | Deg |
| Luminous Intensity | I _V | IF=20mA | 20.0 | 55.0 | | mcd |

| | | | |
|-------|----------------|------------|------------|
| ISSUE | VERSION : | DATE : | ENGINEER : |
| | A | 2001/10/12 | |
| | DIMENSION NO : | CHECKER : | APPROVER : |
| | | | |