



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

arlight

ARPL-1W Green (GNH1E)

Мощный 1W зеленый светодиод «Emitter»



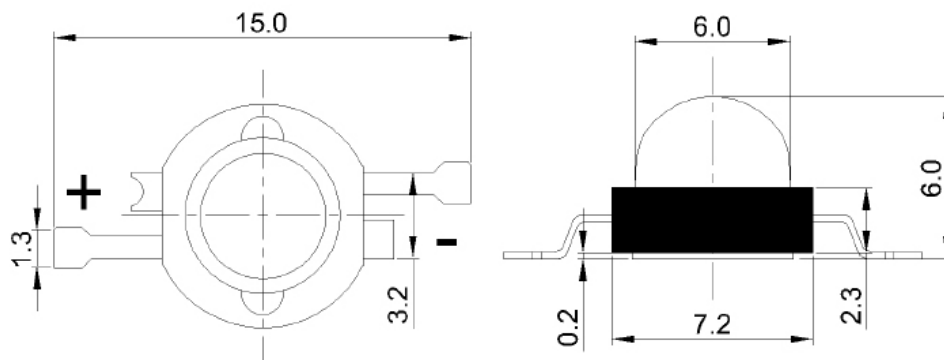
Features

- Long operating life
- Highest flux
- Available in Green
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam, safe to the touch
- Instant light (less than 100ns)
- Fully dimmable
- No UV
- Superior ESD protection
- Eutectic die bonding
- RoHS compliant

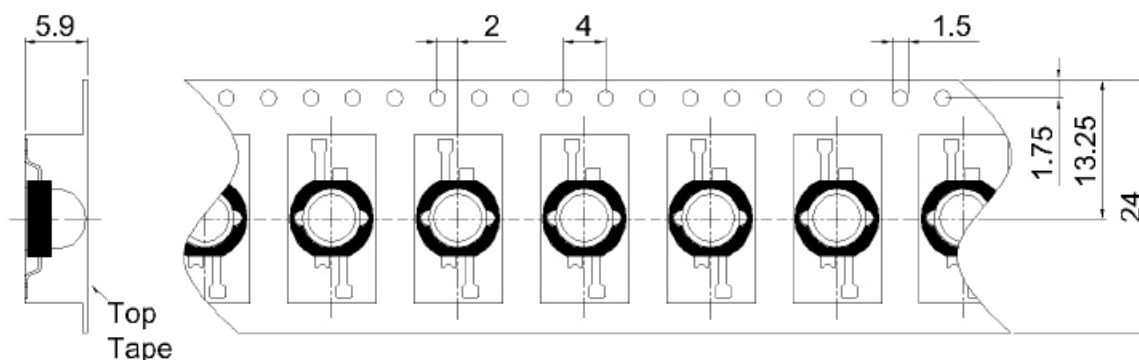
Applications

- Reading lights (car, bus, aircraft)
- LCD Backlights/light Guides
- Fiber optic alternative/ Decorative / Entertainment
- Mini-accent/Up lighters/Down lighters/ Orientation
- Indoor/Outdoor commercial and Residential Architectural
- Cove/Under shelf/Task
- Bollards/Security/Garden
- Portable (flashlight, bicycle)
- Edge-lit signs (Exit, point of sale)
- Automotive Exit (Stop-Tail-Turn, CHMSL, Mirror Side Repeat)
- Traffic signaling / Beacons / RailCrossing and Way-side

Package Dimensions



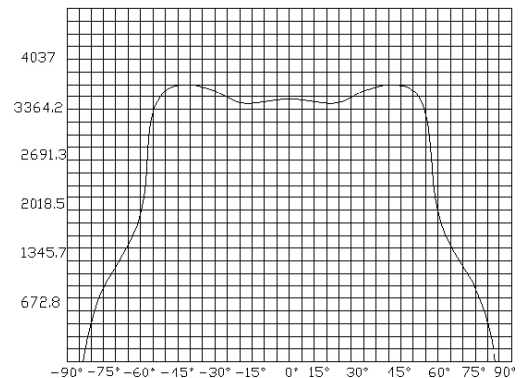
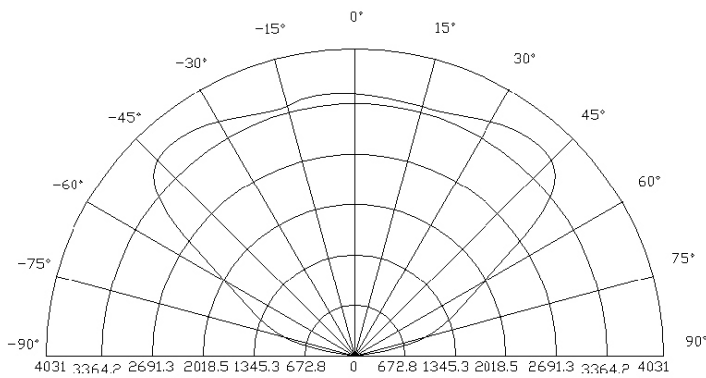
Tape Specifications (Units:mm)



Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is ± 0.2 mm unless otherwise noted.

Radiation Pattern



Typical Electrical / Optical Characteristics at TA=25°C

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|-------------------------------------|--------|-----------|------|------|------|------|
| Forward Voltage | VF | IF=350mA | 3.0 | -- | 3.8 | V |
| Reverse Current | IR | VR=5v | -- | -- | 50 | uA |
| 50% Power Angle | 2θ1/2 | IF=350mA | 110 | -- | 140 | deg |
| Luminous Intensity | φV | IF=350mA | 51.7 | 59.8 | -- | lm |
| Recommend Forward Current | IF | -- | -- | 350 | -- | mA |
| Wave Length | λd | IF=350mA | 520 | -- | 530 | nm |
| Thermal Resistance,Junction to Case | RJP | IF=350mA | -- | 10 | -- | °C/W |
| The sample delivers goods data | | | | | | |
| Item | Symbol | Condition | Min. | Avg. | Max. | Unit |
| Luminous Intensity | φV | | 53 | 57 | 61 | lm |
| 50% Power Angle | 2θ1/2 | IF=350mA | -- | -- | -- | deg |
| Forward Voltage | VF | 3.6 | 3.7 | 3.8 | v | |
| Wave Length | λd | 520 | | 525 | nm | |

Notes:

- 1.Tolerance of measurement of forward voltage±0.1V.
- 2.Tolerance of measurement of peak Wavelength±2.0nm.
- 3.Tolerance of measurement of luminous intensity±15%.

Absolute Maximum Rating

| Item | Symbol | Absolute Maximum Rating | Unit |
|-----------------------------|--------|--------------------------|------|
| Forward Current | IF | 350 | mA |
| Peak Forward Current* | IFP | 500 | mA |
| Reverse Voltage | VR | 5 | V |
| Power Dissipation | PD | 1000 | mW |
| Electrostatic discharge | ESD | ±2000 | V |
| Operation Temperature | TOPR | -40~+80 | °C |
| Storage Temperature | TSTG | -40~+100 | °C |
| Lead Soldering Temperature* | TSOL | Max. 260°C for 3sec Max. | |

*IFP Conditions Pulse Width≤10msec duty≤1/10

* All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a appropriate heat dissipation equipment.

* Re-flow,wave peak and soak-stannum soldering etc.is not suitable for this products.

* Suggest to solder it by professional high power LED soldering machine.

* Can use invariable-temperature searing-iron with soldering condition:≤260 degree less than 3 seconds.