



Sun Spectrum LED

Grow with Innovation

LED Chip Specifications: 500 Watt

| Description | Symbol | Rating |
|----------------------------|--------|----------------|
| Size | | 70mmx70mm |
| DC Forward Current | I_F | 12.5 A |
| Forward Voltage (Max) | V_F | 36 V |
| Operating Temperature | T_O | -20°C to +70°C |
| Storage Temperature | T_S | -30°C to +85°C |
| Junction Temperature (Max) | T_J | 120°C |
| Peak Forward Current | I_p | 25 A |
| Reverse Voltage | V_R | 50 V |



| Chip | Cool White | Warm White | Day Light | Tungsten |
|---------------|-----------------|------------------|------------------|------------------|
| CCT | 4,500K-6,000K | 3,000K-4,500K | 5600K | 3200K |
| Luminous Flux | 57,500-60,00 lm | 47,500-50,000 lm | 46,000-48,000 lm | 40,000-42,000 lm |
| CRI | 72 | 80 | 95 | 98 |
| Life | 50,000 hr | 50,000 hr | 50,000 hr | 50,000 hr |

Max. Rating at $T_A = 25^\circ\text{C}$

Manual Soldering

The top temperature of soldering iron should not exceed 300°C. The soldering time should not exceed 3 seconds. The soldering position must be 3mm outside of LED colloid.

ESD Countermeasure

Static electricity and high voltage can damage the LED. The production whose Die material is InGaN must strictly be required to prevent ESD. It is required that you put on static glove and a static fillet. The soldering tool and the cover of the device must connect to the ground. Soldering conditions must follow the related information in the specification manual.

Constant Current Drive

Please add constant current drive to circuit in order to avoid damaging LED due to large current and voltage fluctuation.

Storage Time

1. LED can be stored for a year under the following conditions: temperature of 5°C ~5°C and humidity of RH60%. The production must be re-inspected and tested before use if the storage time exceeds a year.
2. If LED is exposed to air for a week under the following conditions: temperature of 5°C ~35°C, humidity of RH60%, place the ambience temperature at 65°C ±5°C for 24 hours and use it within 15 days for best results.

Cleaning

Be careful of some chemicals because the LED colloid fades and can become damaged. You can use ethanol to wash or soak LED, but the time should not exceed 3 minutes.



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