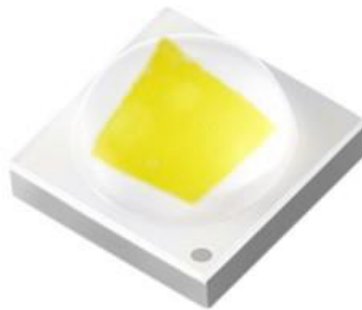


LED PACKAGE FOR GENERAL LIGHTING



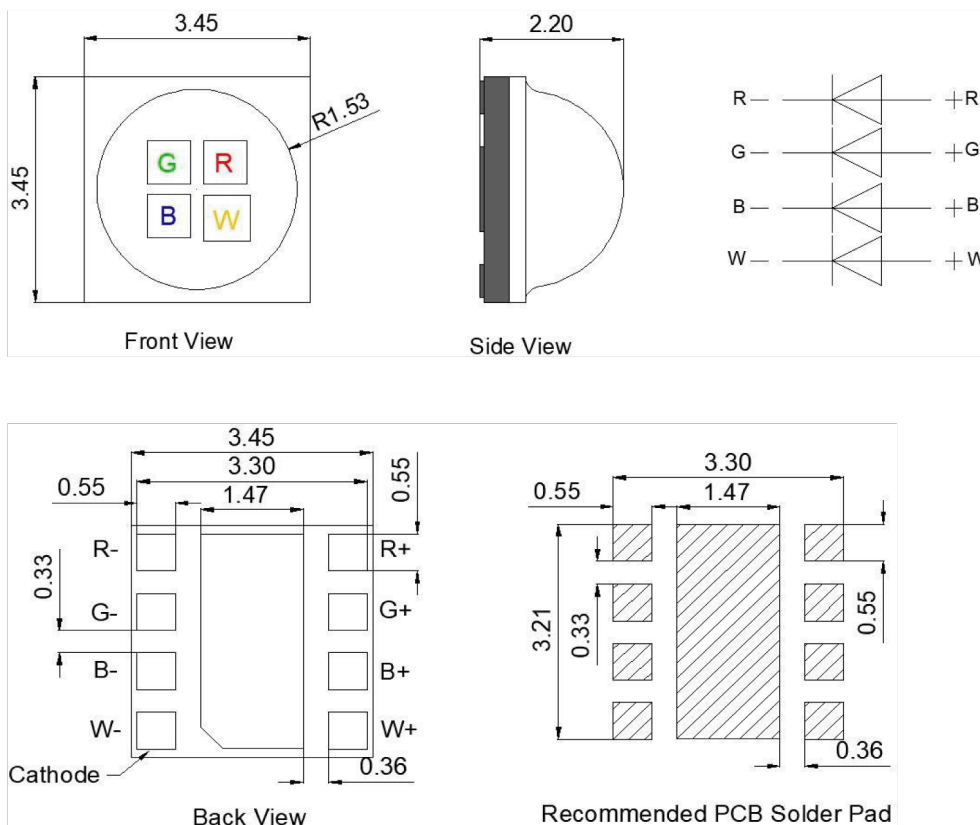
Features

- Small package with high efficiency
- Low voltage operation, instant light
- Long operating life
- (4) Lead-free product
- RoHS compliant

Applications

- Architectural / Decorative Lighting
- Landscape Lighting

Package Dimensions



Notes:

1. All dimensions are in mm
2. Tolerance is ± 0.13 mm unless otherwise noted

ELECTRICAL/OPTICAL SPECIFICATION

T_a=25°C

ITEM	TEST CONDITION	SYMBOL	MIN.	TYP	MAX.	UNIT
Forward Voltage	IF=350mA (R)	VF	2.0	-	2.4	V
	IF=350mA (G)	VF	2.8	-	3.2	V
	IF=350mA (B)	VF	2.8	-	3.2	V
	IF=350mA (W)	VF	2.8	-	3.2	V
Luminous Flux	IF=350mA (R)	(lm)	40.0	-	65.0	lm
	IF=350mA (G)	(lm)	70.0	-	90.0	lm
	IF=350mA (B)	(lm)	20.0	-	40.0	lm
	IF=350mA (W)	(lm)	70.0	-	80.0	lm
Wavelength	IF=350mA (R)	λd	620	-	625	nm
	IF=350mA (G)	λd	520	-	525	nm
	IF=350mA (B)	λd	465	-	470	nm
	IF=350mA (W)	CCT	1700	-	6500	K

Note:

Test tolerance luminous flux = ±5%, forward voltage = ±0.1 V

Voltage classification standard: 0.2V/file

Wavelength classification standard: 5nm/file

ABSOLUTE MAXIMUM RATINGS

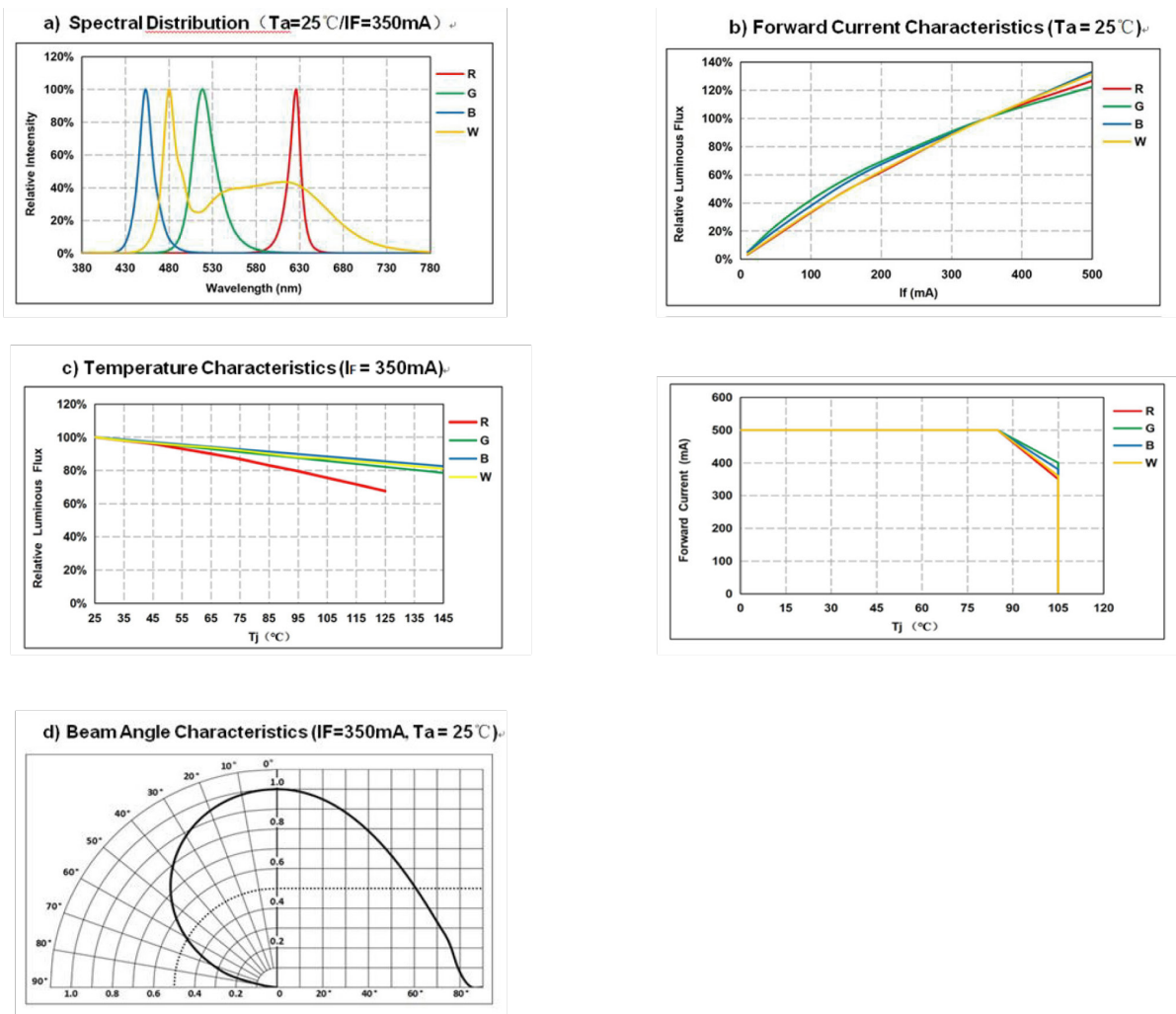
T_a=25°C

ITEM	SYMBOL	RATING	UNIT
DC Forward Current	IF	350	mA
Pulse Forward Current	IFP	500	mA
Power Dissipation	PD	1.0	W
Operation Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +85	°C
LED Junction Temperature	T _j	125	°C
ESD	HBM	2000	V
Reverse Current	IR	1 (VR=5V)	μA
Moisture Sensitivity Rating	MSR	MSL3	°C/RH/H

Note:

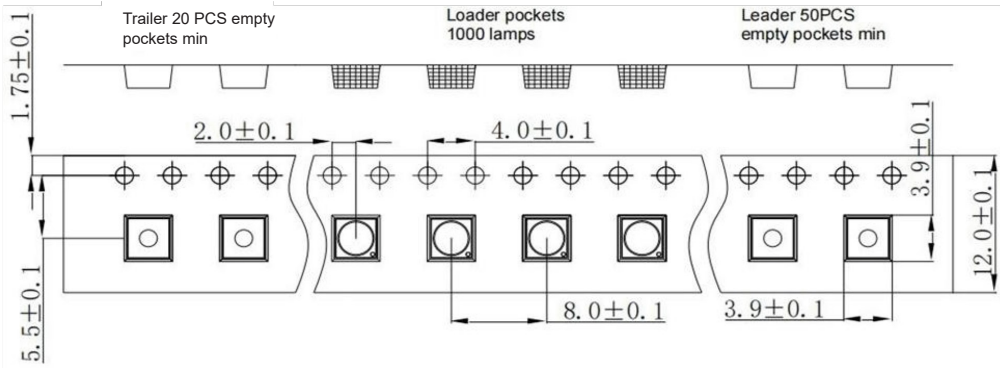
Refer to the derating curve (Typical Electrical / Optical Characteristic Curves c) graph 2 for the driving current that maintains operation below maximum junction temperature.

Typical Electrical /Optical Characteristic Curves ($I_F=350\text{mA}$; $T_A=25^\circ\text{C}$)

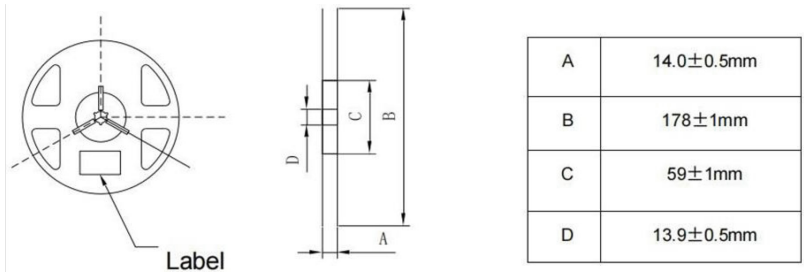


NOTE: Refers to temperature tested at the correct operating current.

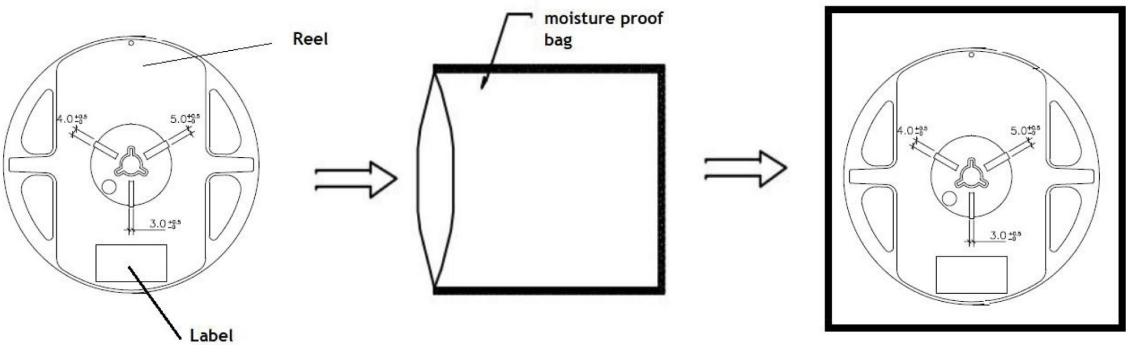
Dimensions of Tape



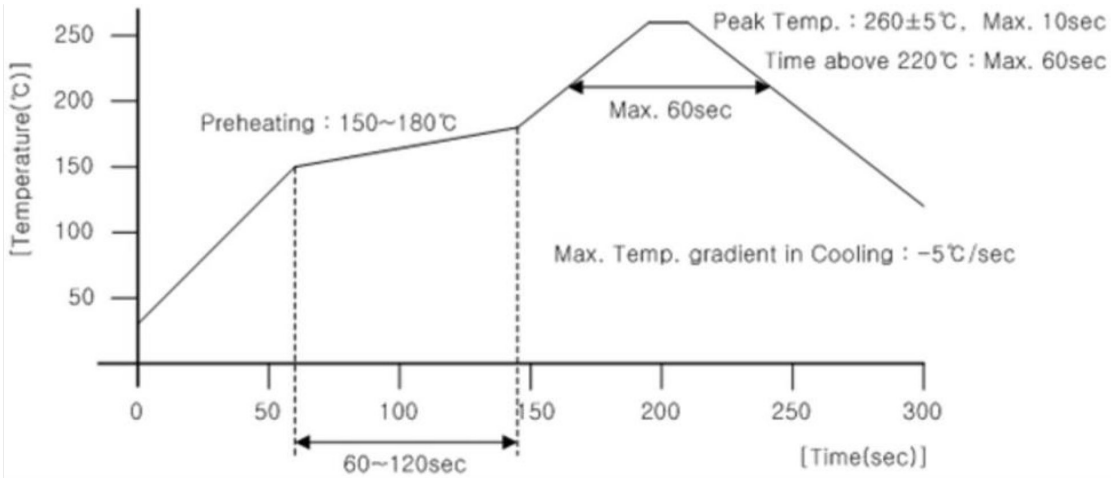
Dimensions of Tape



Packaging Specifications

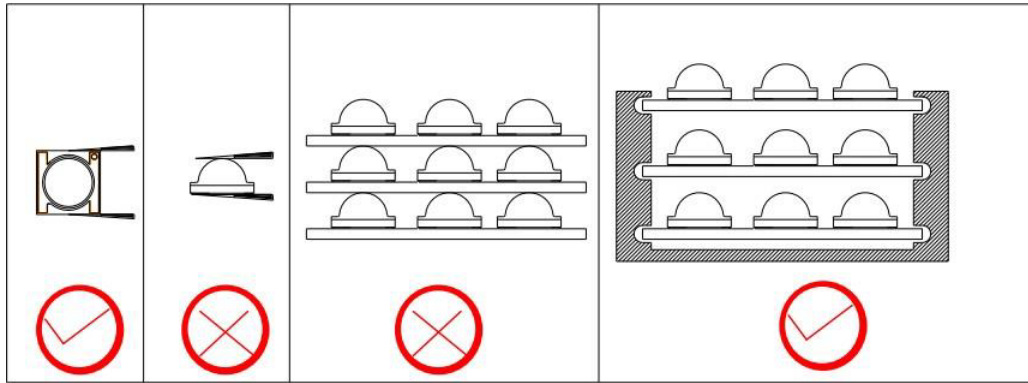


SMT Reflow Soldering Instructions



CAUTIONS

1. In order to avoid moisture absorption, it is suggested to store the products in a drying cabinet with desiccant. The storage temperature is 5°C~30°C, and the humidity is ≤60%HR
2. After six months of storage it is recommended to repeat spectral separation to prevent and possible changes to photoelectric parameters.
3. It is recommended that products that have been sealed and stored for more than six months should be dried before use at 65°C±5°C for 10 hours.
4. The product should be used within 24 hours after opening; otherwise, it must be baked at 65°C for 4-6 hours before reflow welding.
5. The encapsulated material of the LEDs is silicone, meaning the top of the package is a soft surface. Pressure to the top surface can influence the reliability of the LEDs. Precautions must be taken to avoid pressure to the end cap saluted part.
6. Handle the product component using only appropriate tools (such as forceps). NEVER touch the silicone lens surface – this will damage internal circuitry.



7. Electrostatic protection. LED is a chip sensitive electronic component. Various measures should be taken to avoid static electricity, such as wearing an electrostatic bracelet or anti-static gloves during use. All devices, equipment and instruments should be well grounded.
8. VOCs (Volatile Organic Compounds) can be generated from adhesives, flux, hardener or organic additive used in luminaires (fixtures). Transparent LED silicone encapsulant is permeable to those chemicals and they may lead to a discoloration of encapsulant when they exposed to heat or light. This phenomenon can cause a significant loss of light emitted (output) from the luminaires. In order to prevent these problems, we recommend users to know the physical properties of materials used in luminaires and they must be carefully selected.
9. Devices require baking before mounting, if humidity card reading is >60 % at 23 ± 5 °C. Devices must be baked for 1 hour at 60 ± 5 °C, if baking is required.