

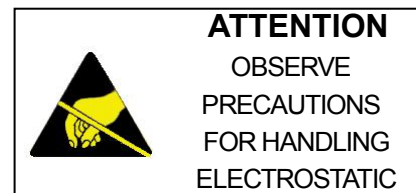
Features

- Package Size: 3.5 (L) × 2.8(W) × 0.8 (T) mm
- Silicone Packed
- Suitable for different working environment
- Super long lifetime: 30000HRs
- Anti UV
- White colors are available in(2700K- 15000K)
- Wide viewing angle ($2\theta_{1/2}=120^\circ$)



Device Selection Guide

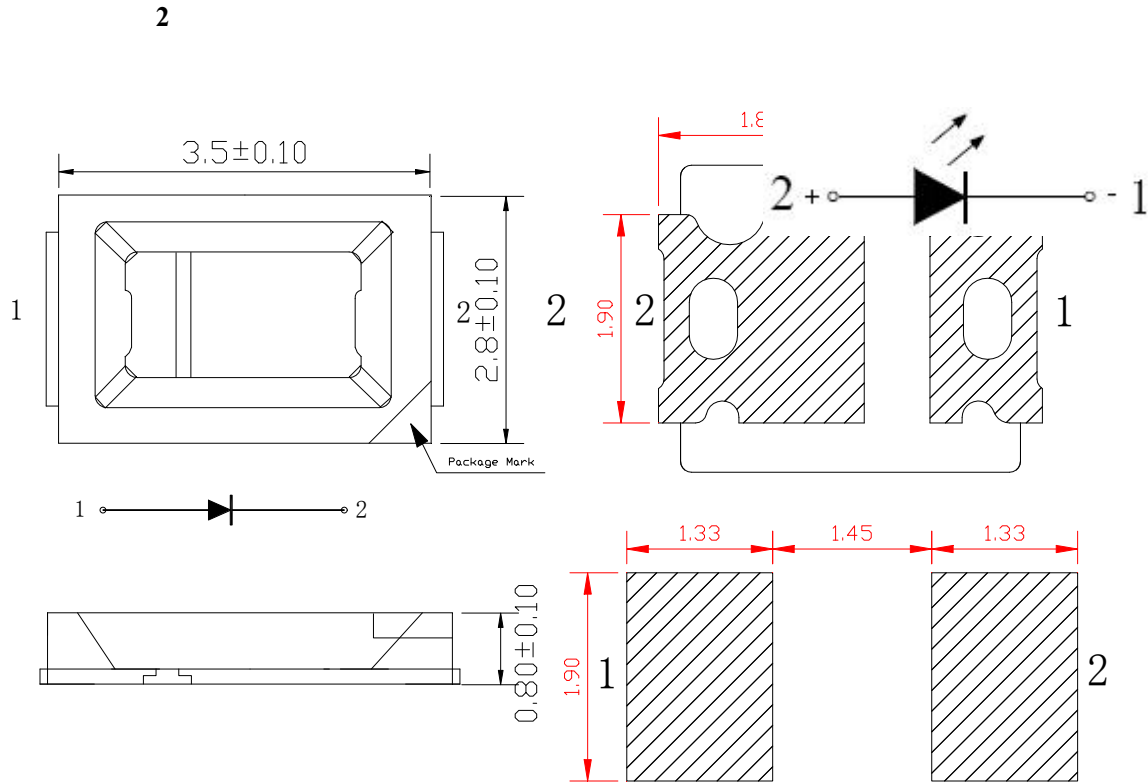
ITEM	MATERIALS
<u>Resin</u>	<u>Silicone</u>
Bonding wire	Φ 1mil Au
Lens color	



Applications

- **Indoor lighting:** Fluorescent lamp, tube
- **Commercial illumination and displays:**
Advertising words, light box
- **LCD Backlighting**
- **Decorative lighting:** light strip
- **Automotive interior auxiliary lighting**
- **Other illumination and displays**

Package Outline Dimensions



焊盘图

Recommended solder pad for SFC-2835 series

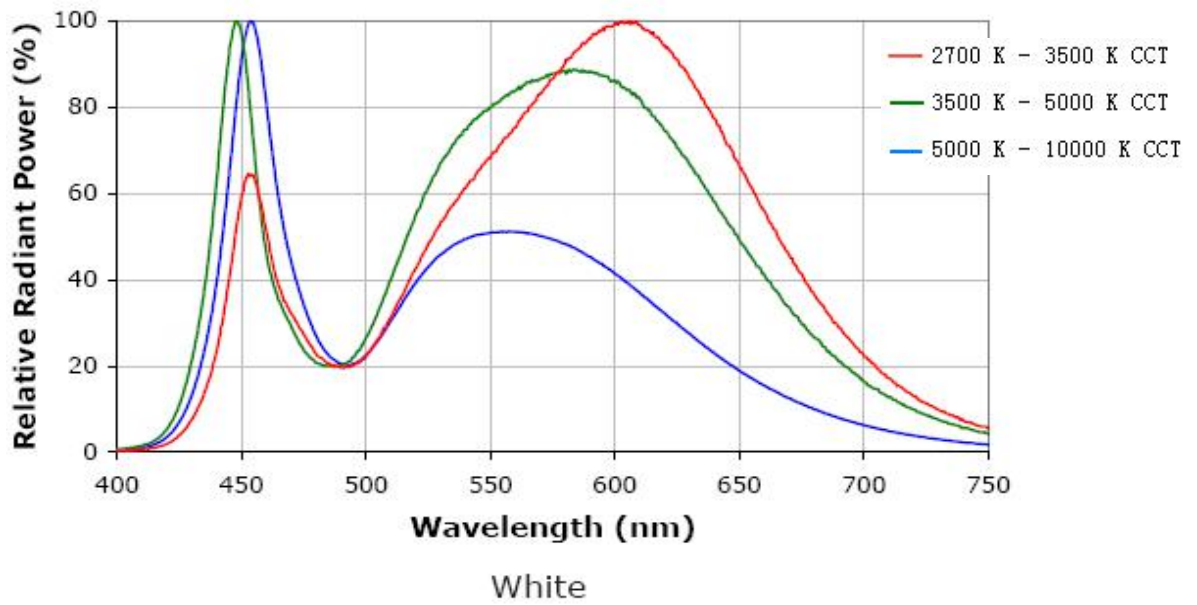
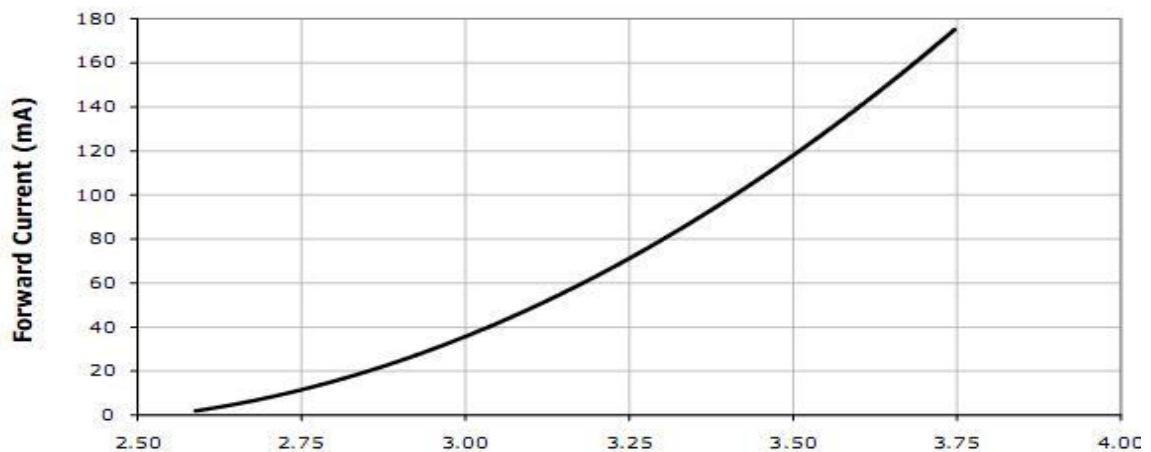
Note: The tolerances unless mentioned is ± 0.01 mm.

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	3.2	mA
Operating Temperature	T_{opr}	-20 ~ +80	°C
Storage Temperature	T_{stg}	-20 ~ +80	°C
Soldering Temperature	T_{sol}	265(for30 seconds)	°C
Power Dissipation	P_d	200	mW
Peak Forward current (Duty 1/10 @ 1KHz)	I_{FP}	60	mA

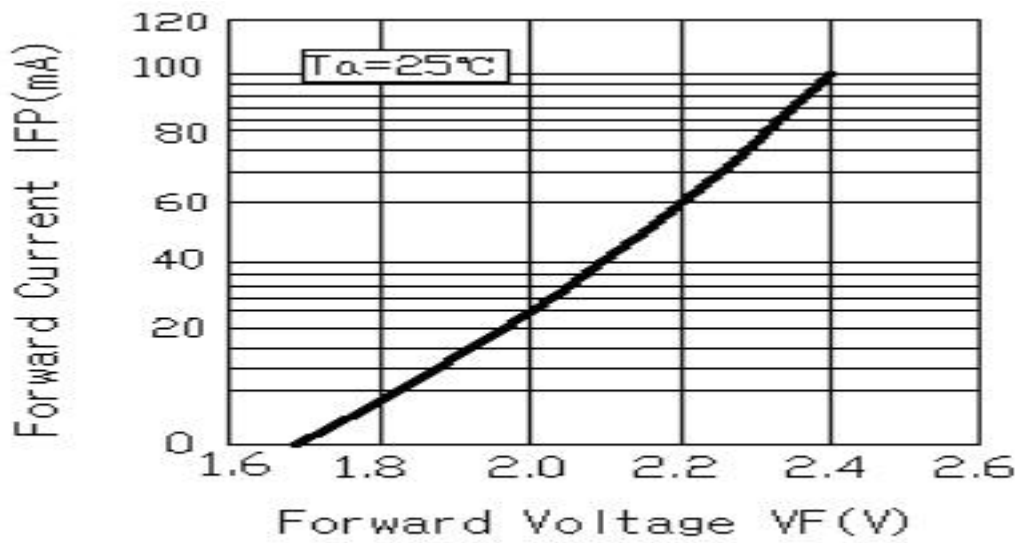
Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Viewing Angle	$2\theta_{1/2}$	-----	120	-----	deg	If=60mA
Reverse Current	I_R	-----	-----	100	μA	$V_R=5V$
CCTRange	TC	2000	-----	2500	K	If=60mA
Chromaticity coordinates		:0.45 Y:0.32		:0.46 Y:0.34		If=60mA
Forward Voltage(V)	V_f	3.0	-----	3.2	V	If=60mA
Luminous Flux(lm)	ϕ	18	-----	25	lm	If=60mA

Relative spectral power

Electrical characteristic curve


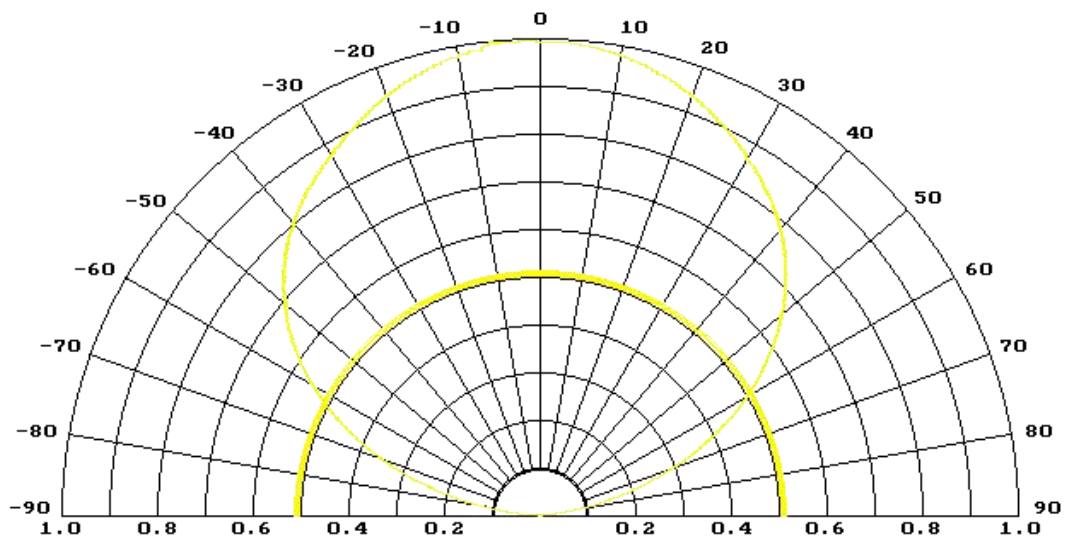
Royal Blue , Blue, Green, White

Thermal design



Red, Amber, Orange

Directive Characteristics



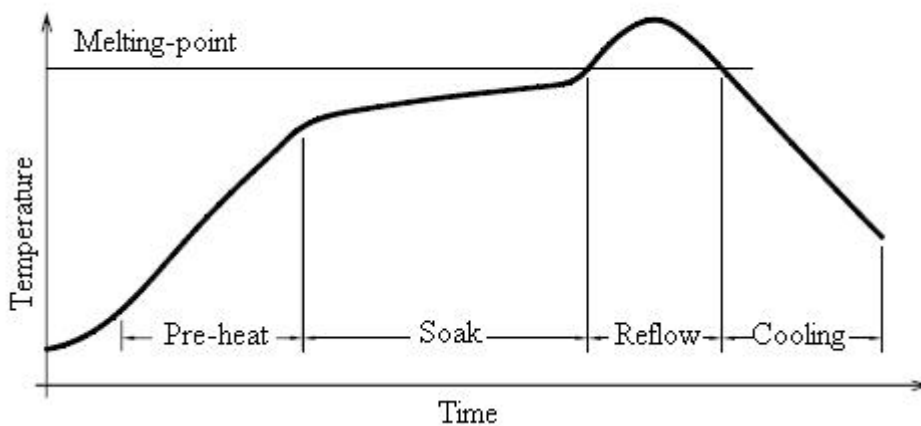
● **Reflow Temp/Time**

Temperature (top surface of the SMD LED)profile:

Handling of an SMD LED Should be done only when the Package has been cooled down to below 40°C or less. This is to Prevent SMD LED failures due to thermal-mechanical stress during handing.

● **Reflow soldering**

Temperature (top surface of the SMD LED)profile:



1.Use with all SMDs

Solder=Sn63-Pb37

Average ramp-up rate= 4°C/sec.max.

Preheat temperature:100° ~150°C

Preheat time =120sec.max.

Ramp-down rate = 6°C/sec.max.

Peak temperature = 230°C max

Time within 5°C of actual peak temperature = 10 sec.max.

Duration above 183°C is 60 sec.max.

2.Solder = Lead-Free

Average ramp-up rate = 4°C/sec.max

Preheat temperature:150~200°C

Preheat time =120 sec.max.

Ramp-down rate = 6°C/sec.max.

Peak temperature = 250°C max.

Time within 5°C of actual peak temperature =10 sec.max.

Duration above 217°C is 60 sec.max.

● **Test circuit**



● Handling precautions

1. Over-current-proof

Customer must apply resistors for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).

2. Cleaning

2.1 When necessary, cleaning should occur only with isopropyl alcohol (IPA) at room temperature (25°C) for a duration of no more than one minute. Dry at room temperature for 15 minutes before use.

2.2 The influence of ultrasonic cleaning on the SMD LED depends on factors such as ultrasonic power and the way the SMD LEDs are mounted. Ultrasonic cleaning should be pre-qualified to ensure this will not causedamage to the SMD LEDs.

3. Storage

3.1 It is recommended to store the products in the following conditions

Humidity: 60% R.H. Max.

Temperature: 5°C~30°C (41°F~86°F)

3.2 Shelf life in sealed bag: 12 month at < 5°C~30°C and < 30% R.H. after the package is opened, the products should be used within 24hrs or they should be kept stored at \cong 20% R.H. with zip-lock sealed.

4. Baking

It is recommended to bake before soldering when the pack is unsealed after 72hrs. The conditions are as followings:

4.1 80±3°C x (10~12hr) and < 5%RH, taped reel type

4.2 100±3°C x (1hr~2hr), bulk type

4.3 130±3°C x (45min ~1hr), bulk type