

Shenzhen Shining Future LED Technology Co., Ltd.

Technical Data Sheet

RoHS

Specification

sfleds-6B1B

Reliability

1. Relative Spectral Power Distribution

Test Item	Test Condition	Note	# Failed /Tested
High Temp. Operational Life	Ta=85℃, IF=350mA	1000hrs	0/10
Low Temp. Operational Life	Ta=-40℃, IF=350mA	1000hrs	TBD
Room Temp. Operational Life	Ta=25℃, IF=350mA	1000hrs	0/10
High Humidity High Temp. Operational Life	Ta=60℃, RH=90%, IF=350mA	1000hrs	0/10
High Temp. Storage	Ta = 100℃	1000hrs	TBD
Thermal shock	Ta max=120℃, Ta min=-40℃ 30min dwell/transfer time : 10sec, 1 cycle=1hr	200 cycles	0/10
Resistance to Soldering	Temp=260±5℃, Time : 10±1 sec	1 time	0/10
Solderability	Temp=260±5℃, 95% Coverage	1 time	0/10
Vibration Variable Frequency	100~1000~100Hz, 20G, Sweep 4 min, 3 directions, 4 cycles	48min.	TBD
ESD	R=1.5kΩ, C=100pF Voltage level=2kV	3 times Negative /positive	0/10

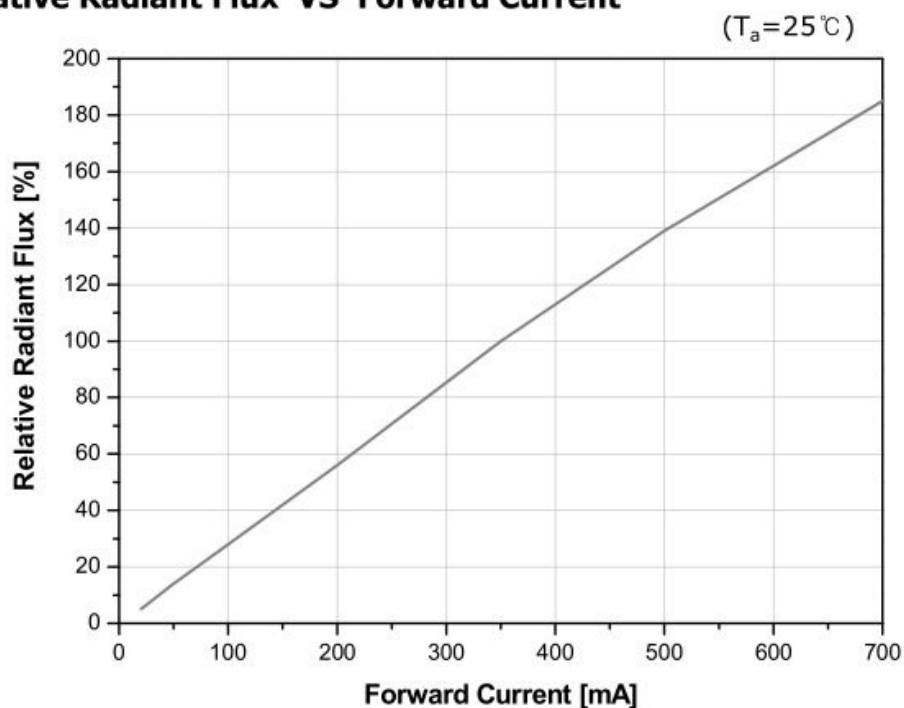
2. Failure Criteria

Parameter	Symbol	Test Conditions	Max. or Min. allowable shift value
Forward Voltage	V_F	IF=350mA	Max. Initial measurement x 1.2
Radiant Flux	Φ_e	IF=350mA	Min. Initial measurement x 0.7

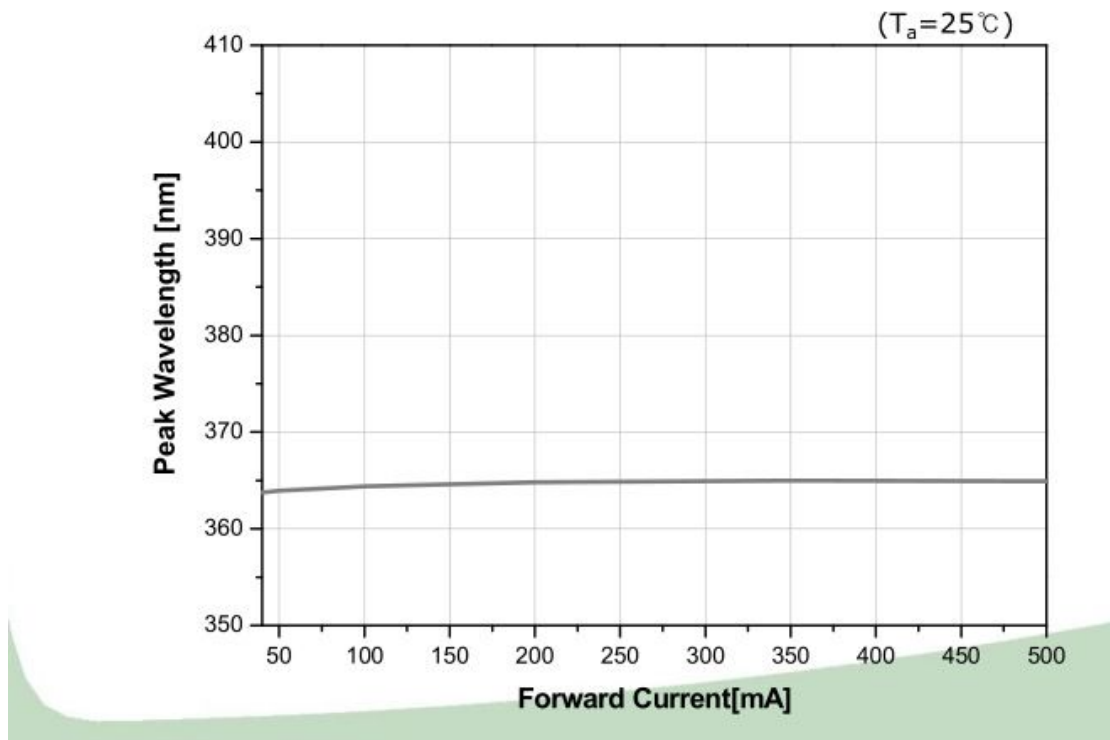
Notes :

1. The value is measured after the test sample is cooled down to the room temperature.

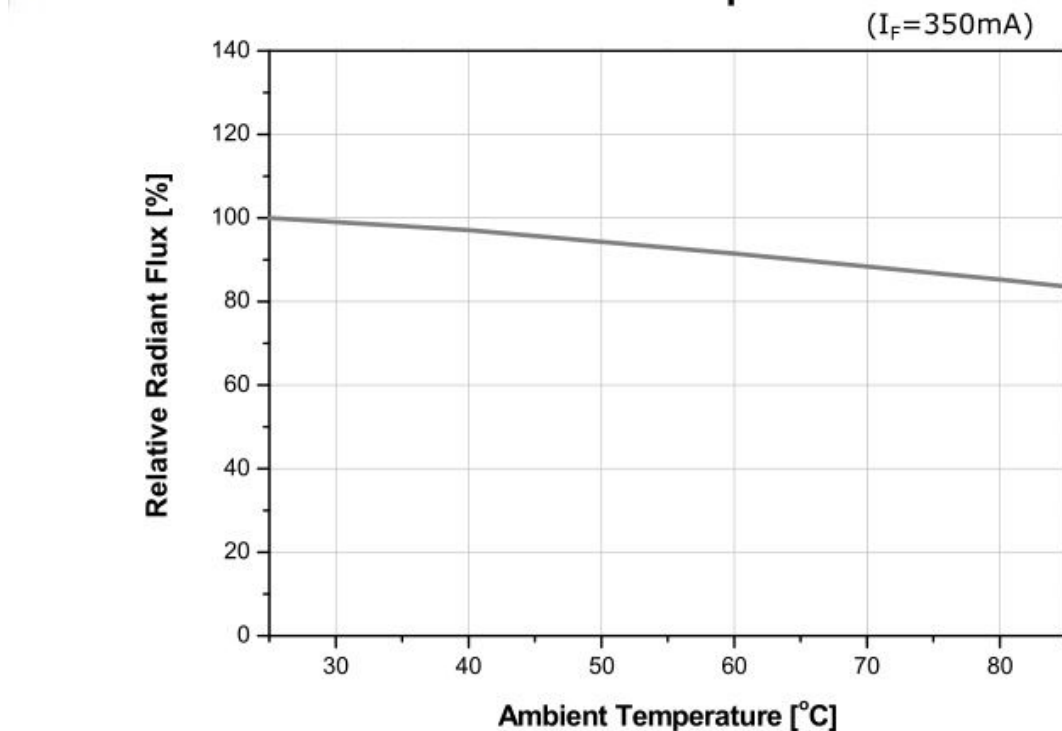
3. Relative Radiant Flux VS Forward Current



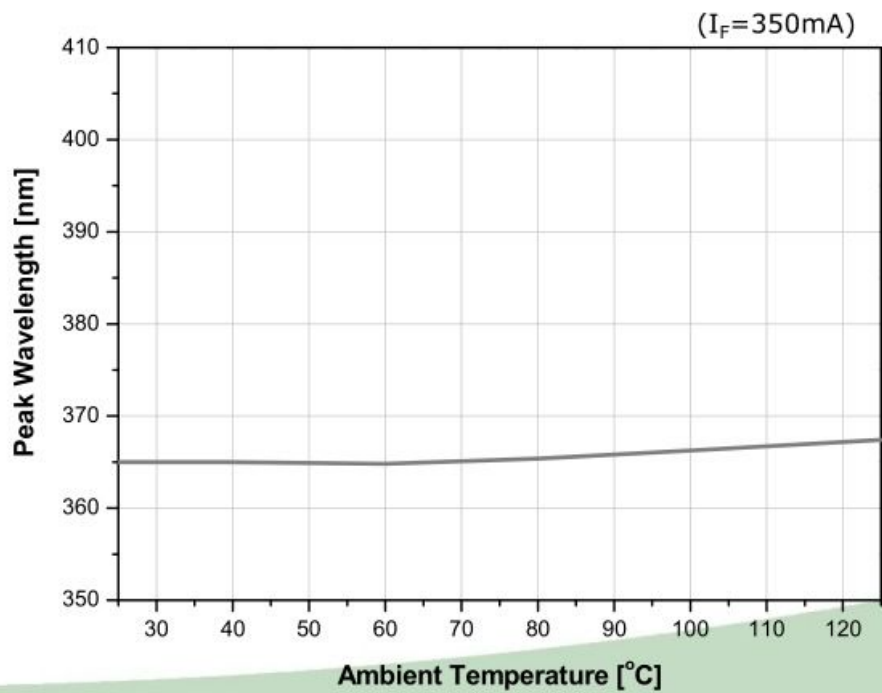
4. Peak Wavelength VS Forward Current



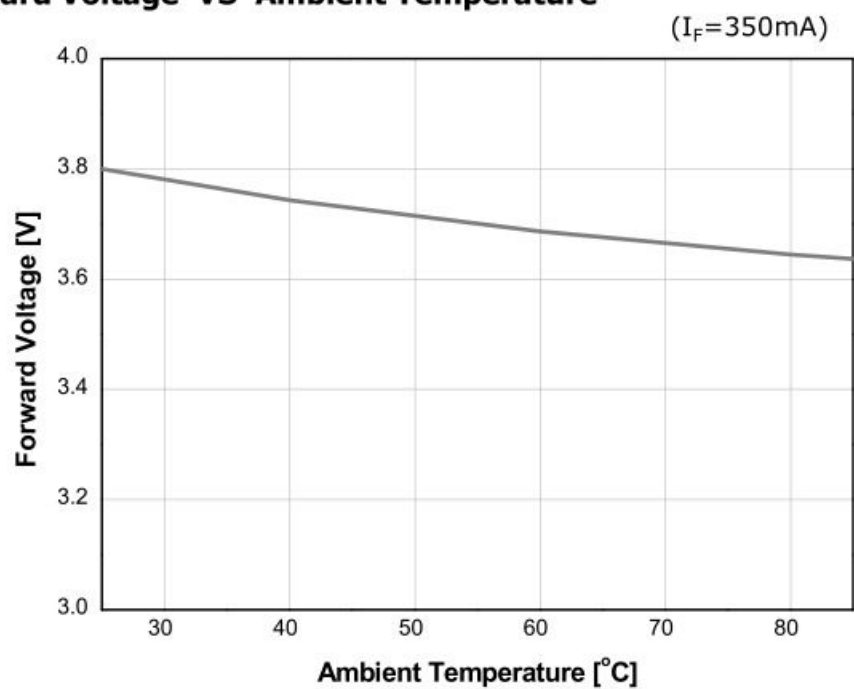
5. Relative Radiant Flux VS Ambient Temperature



6. Peak Wavelength VS Ambient Temperature

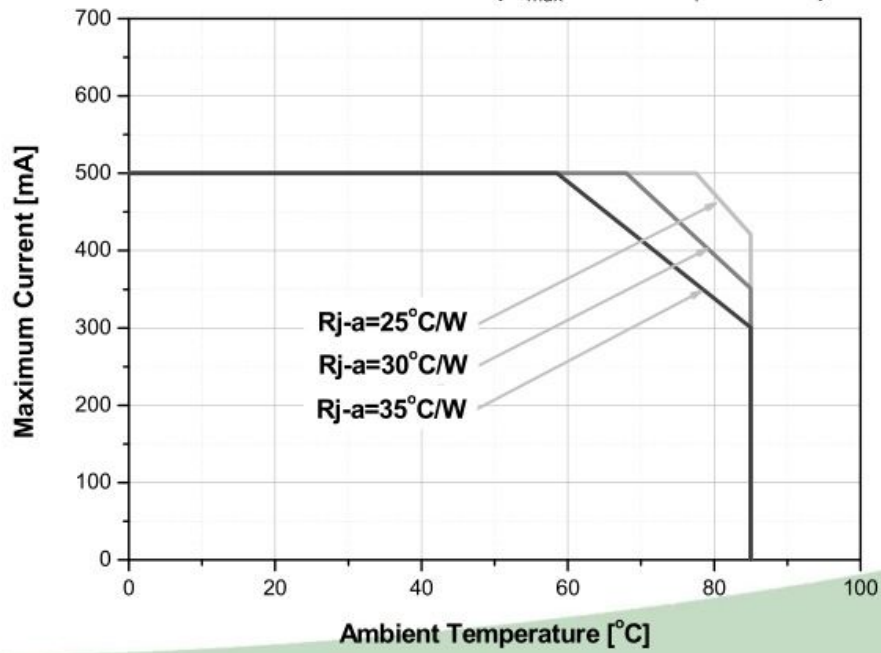


7. Forward Voltage VS Ambient Temperature

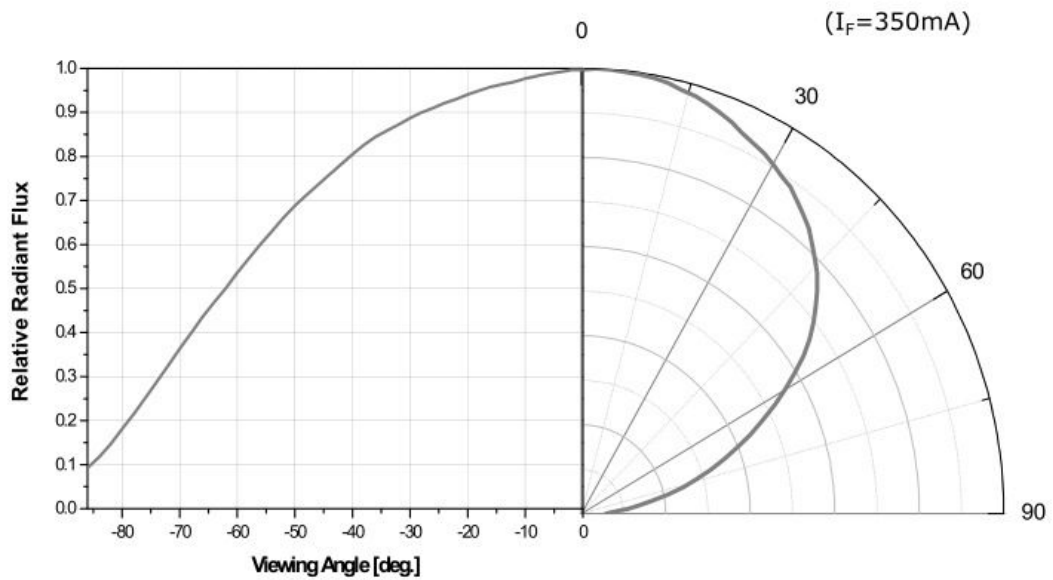


8. Allowable Forward Current VS Ambient Temperature

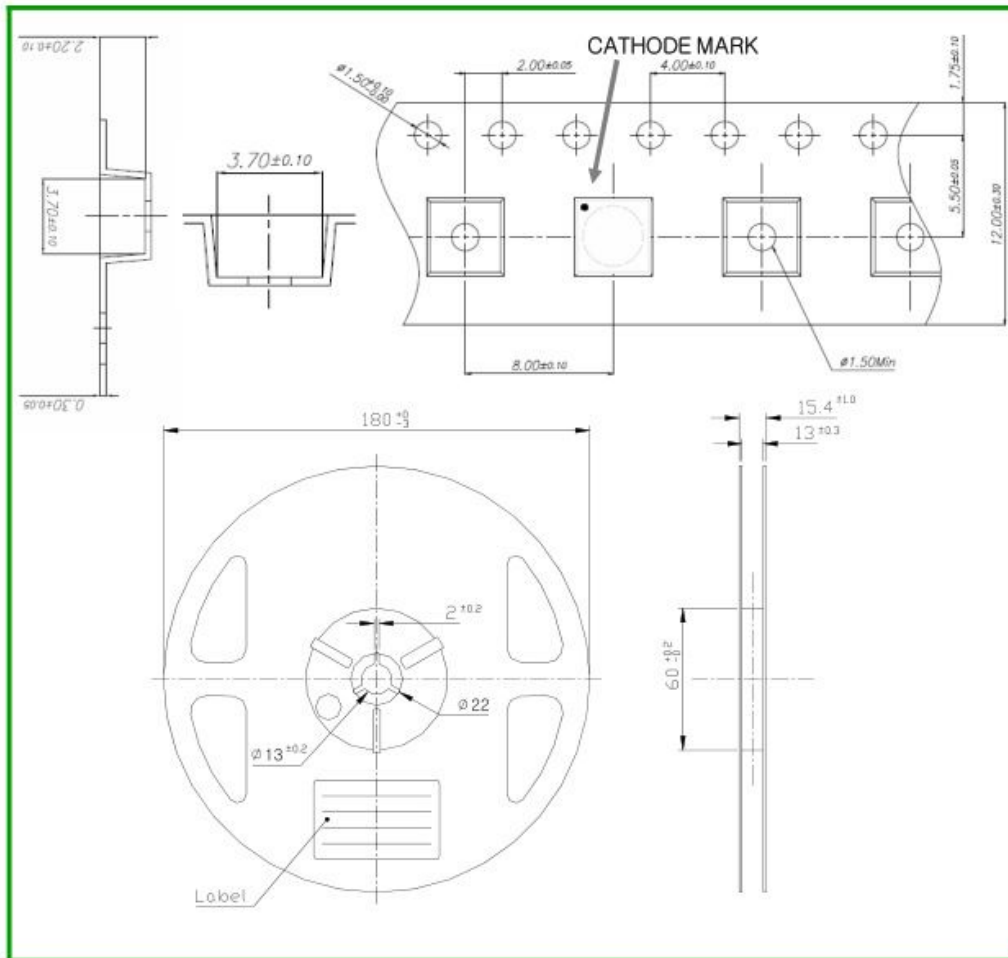
($T_{jmax} = 125^{\circ}C$ $I_F = 500mA$)



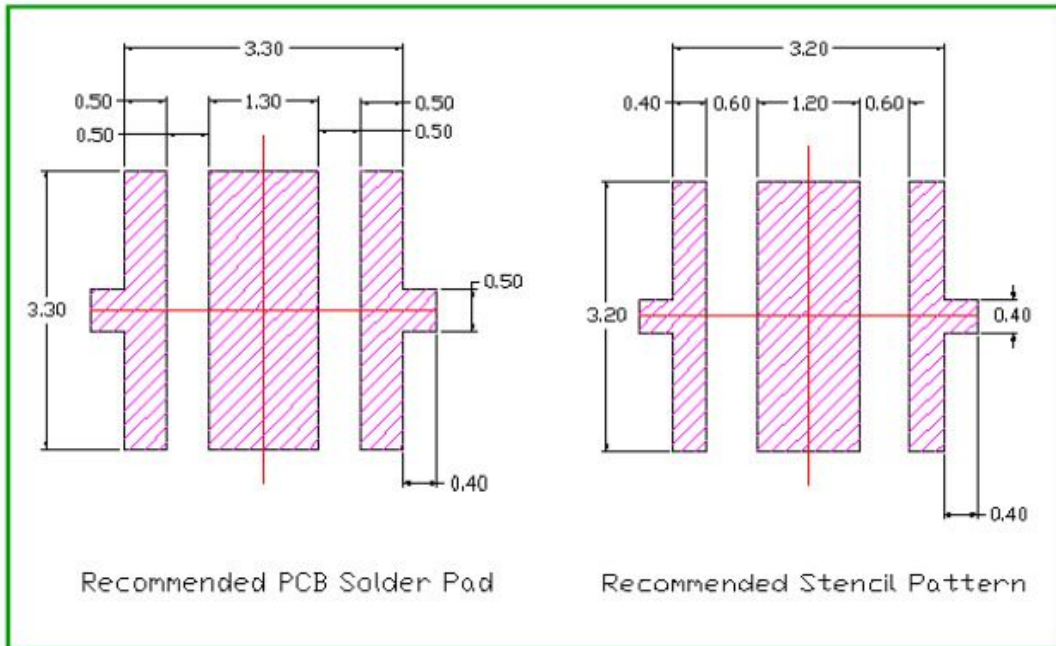
9. Radiation pattern



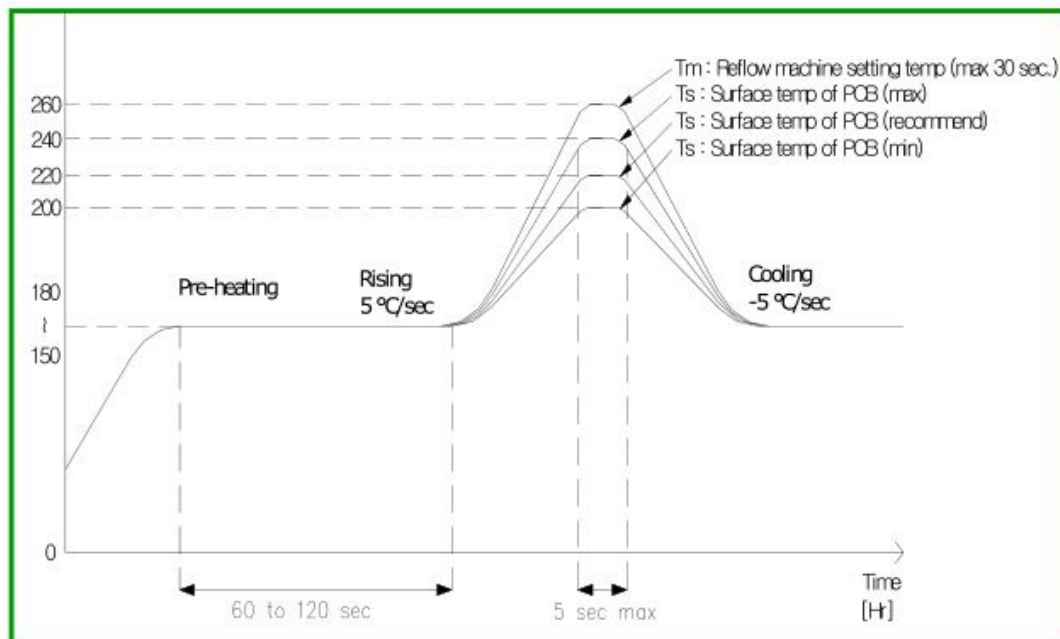
Reel Packaging



Recommended solder pad



Reflow Soldering Profile



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