

NLC3535AV2 Data sheet



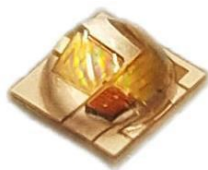
Elec-Tech International Co., Ltd.

Part No: **NLC3535AV2**

Version: **V1.0**

Date: **2018-06-08**

3535RGB (3 in 1)



Features

- High luminous flux density
- Product compact, fit light distribution design
- Perfect Optical Performance
- High efficacy for cost effective solution

Applications

- Wall washer light
- Underground light
- Flood light
- Stage light

Specification

Color @ 350mA	Wavelength Range		Flux/Radiation Flux	Forward voltage	View angle	Thermal Resistance
	Min	Max	Typ	Typ	Typ	Typ
Red	615nm	630nm	62lm	2.20V	140°	6°C/W
Blue	450nm	475nm	22lm	2.95V	140°	6°C/W
Green	520nm	535nm	95lm	3.15V	140°	6°C/W

Notes:

- 1.NLC3535AV2, Test current 350mA, Test Time =20ms, Ambient Temperature=25°C;
2. Beam angle is 50% central light intensity angle,
- 3.Optical simulation software light source data of ProSource\Lighttools\TracePro\ASAP\Zemax etc is available upon request.;
- 3.ETI maintains a testing tolerance of $\pm 7\%$ on flux and power measurements, $\pm 1\text{nm}$ on dominant wavelength measurements, ± 0.1 on voltage measurements.

Absolute Maximum Ratings

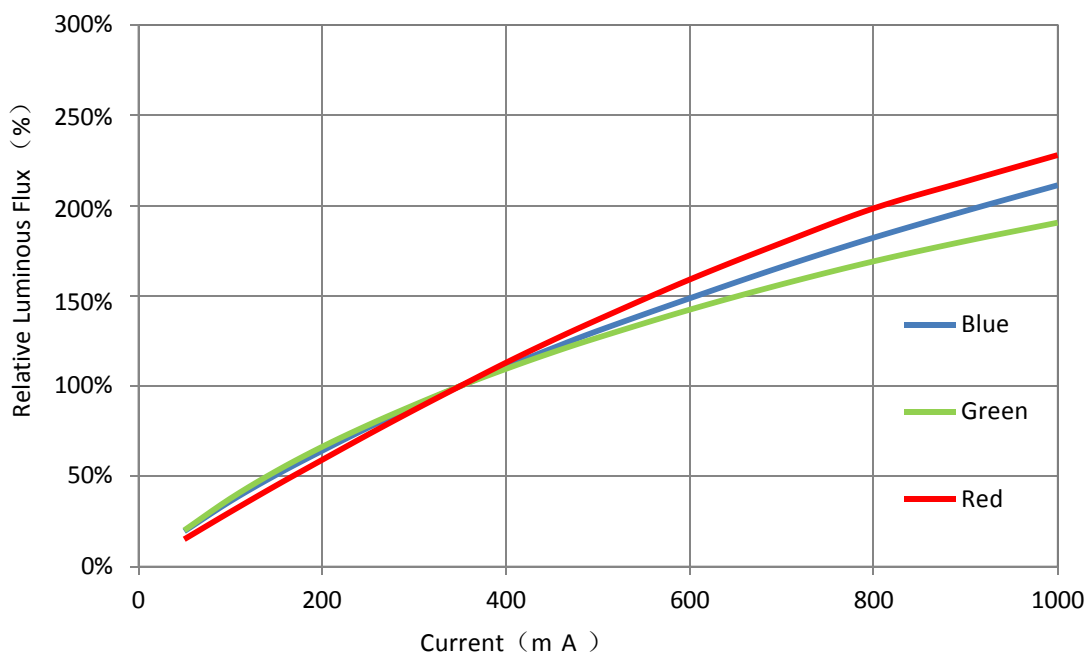
Item	Symbol	Absolute Maximum Rating
Junction Temperature (°C)	T_j	115°C
Operating Temperature (°C)	T_{op}	-40°C -105°C
Storage Temperature(°C)	T_{stg}	-40°C -105°C
Forward Current	I_f	500m A
Pluse Forward Current	I_{FM}	700m A
Reverse voltage	V_R	No Reverse Operation Design

Notes:

1. Maximum Forward Current and Maximum Pulse Current require the junction temperature to be lower than the rated junction temperature;
- 2.IFM condition Pulse width at 50ms and duty cycle at 0.016;

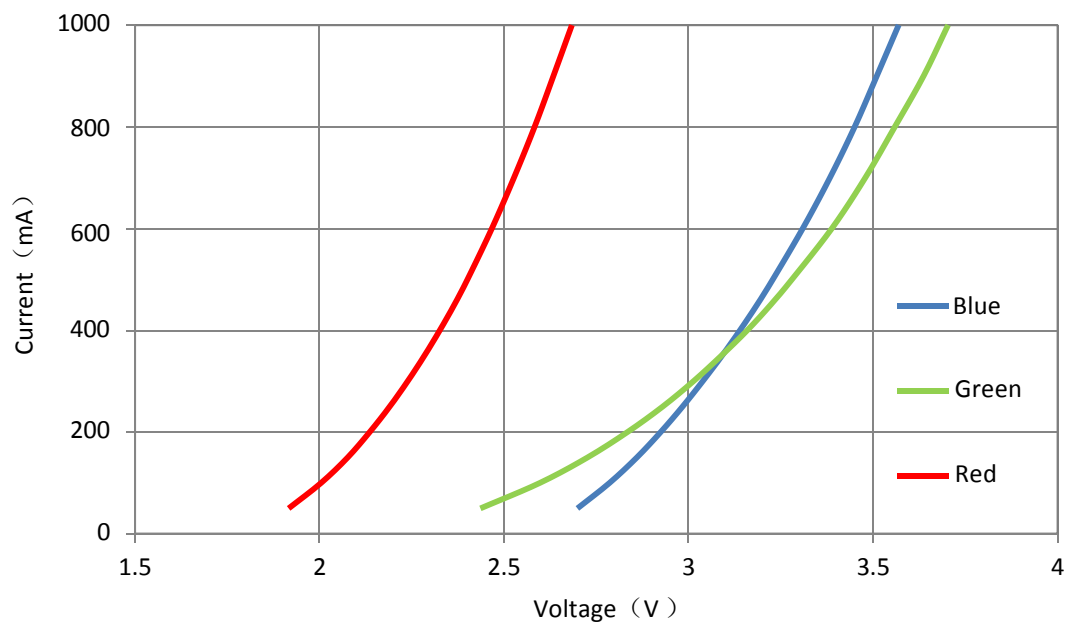
Product Characteristic Curve

Relative Luminous Flux VS Current



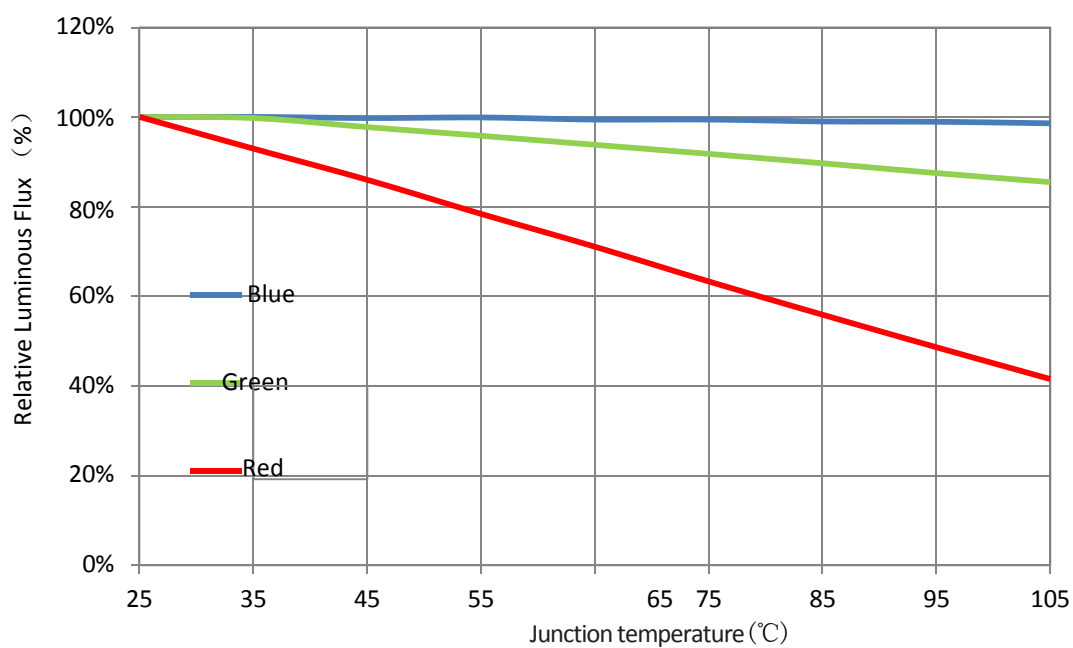
Product Characteristic Curve

Current vs Voltage



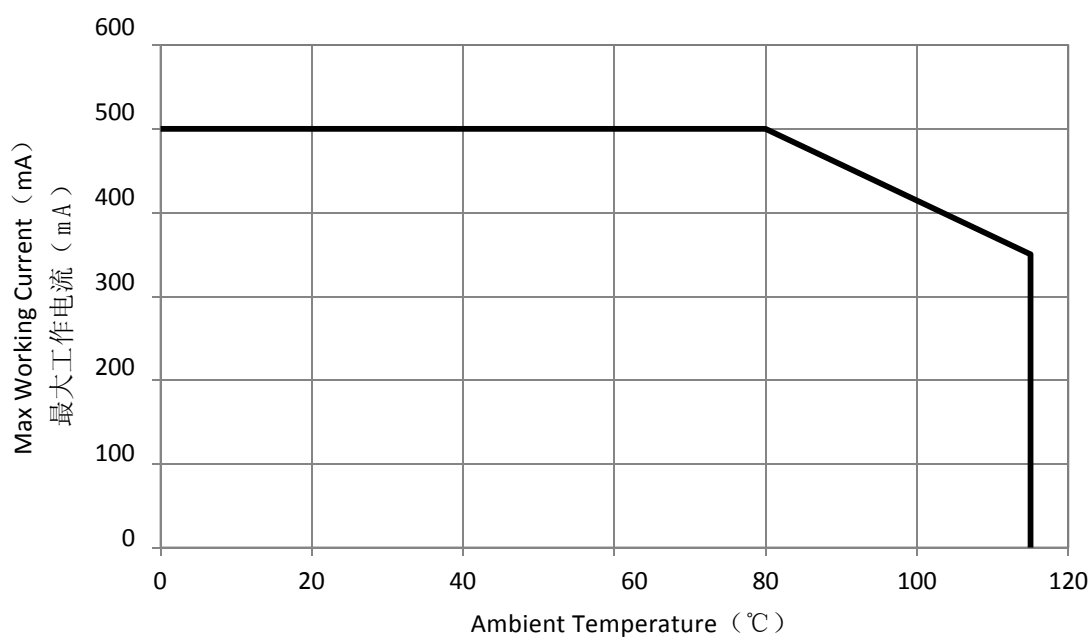
Product Characteristic Curve

Relative Luminous Flux vs Junction Temperature



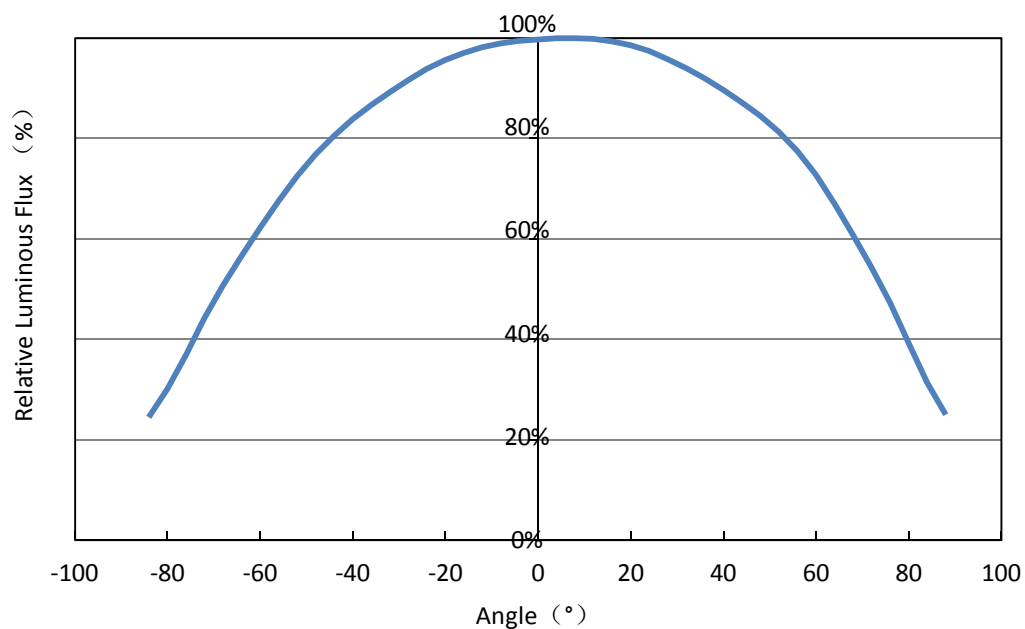
Product Characteristic Curve

Max Working Current VS Ambient Temperature



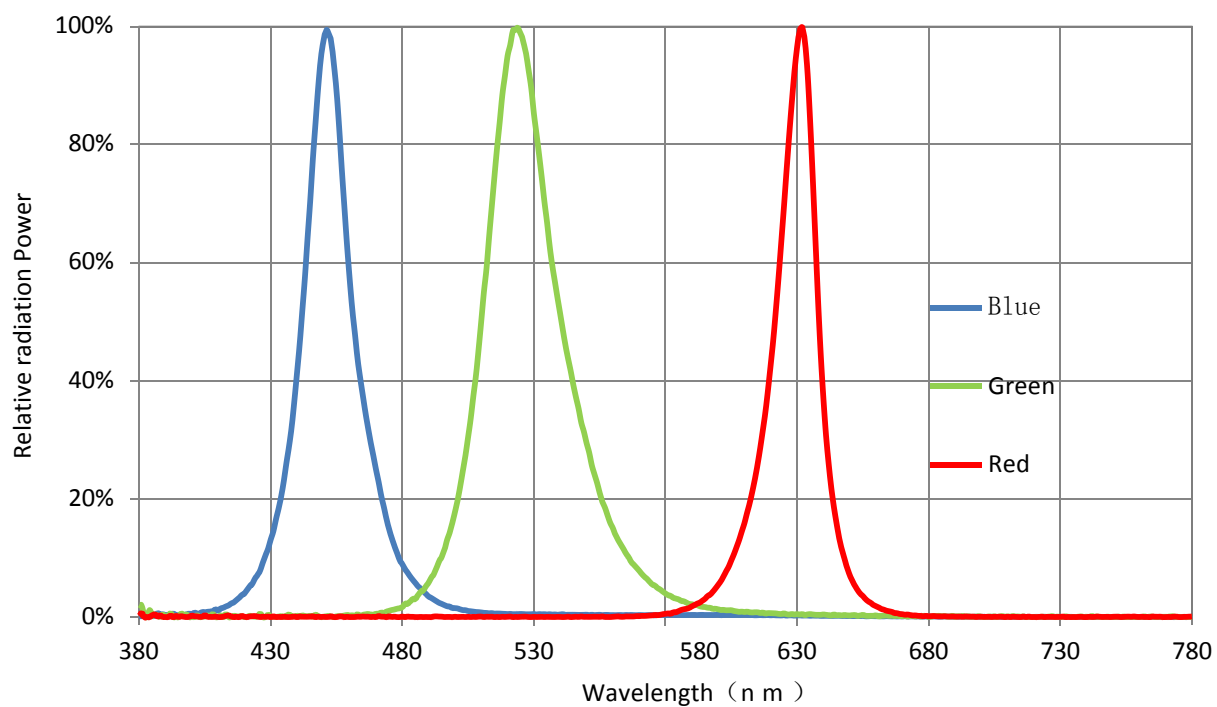
Product Characteristic Curve

Relative Luminous Flux vs Angle

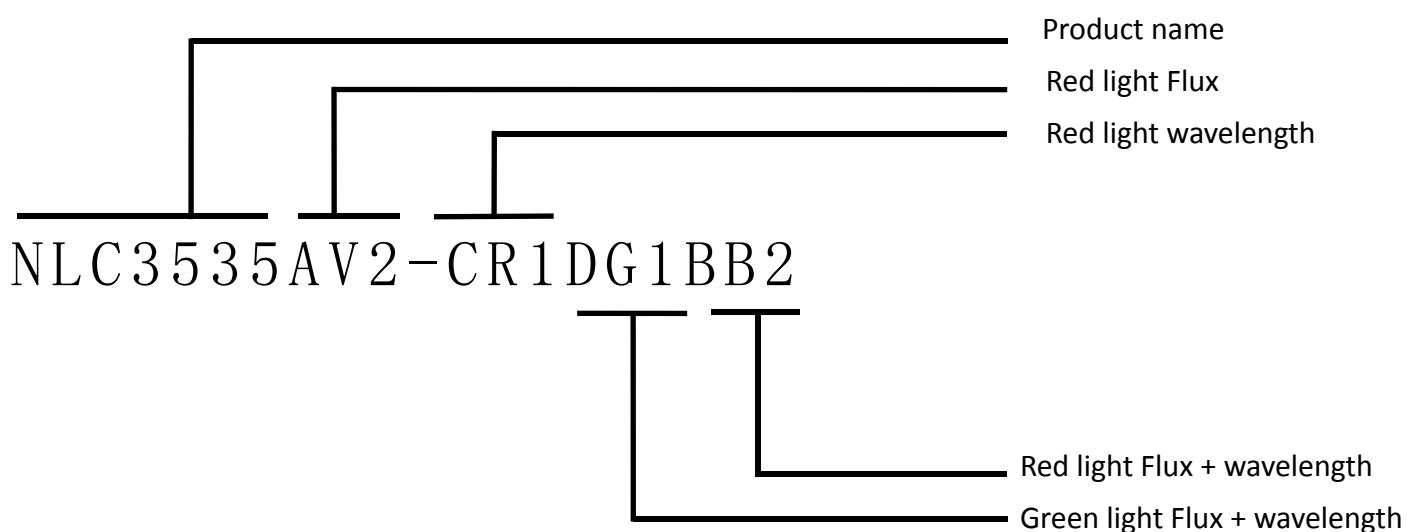


Product Characteristic Curve

Relative radiation Power vs Wavelength



Product Name Description:



Wavelength specification

Wavelength kit	Wavelength	Unit
R1	615~620	nm
R2	620~625	nm
R3	625~630	nm
G 1	520~525	nm
G 2	525~530	nm
G 3	530~535	nm
B1	450~455	nm
B2	455~460	nm
B3	460~465	nm
B4	465~470	nm
B5	470~475	nm

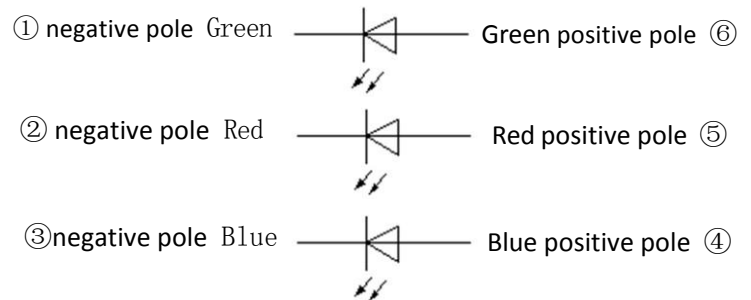
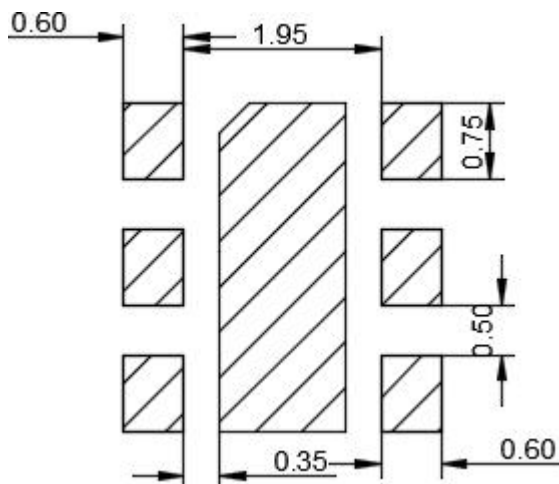
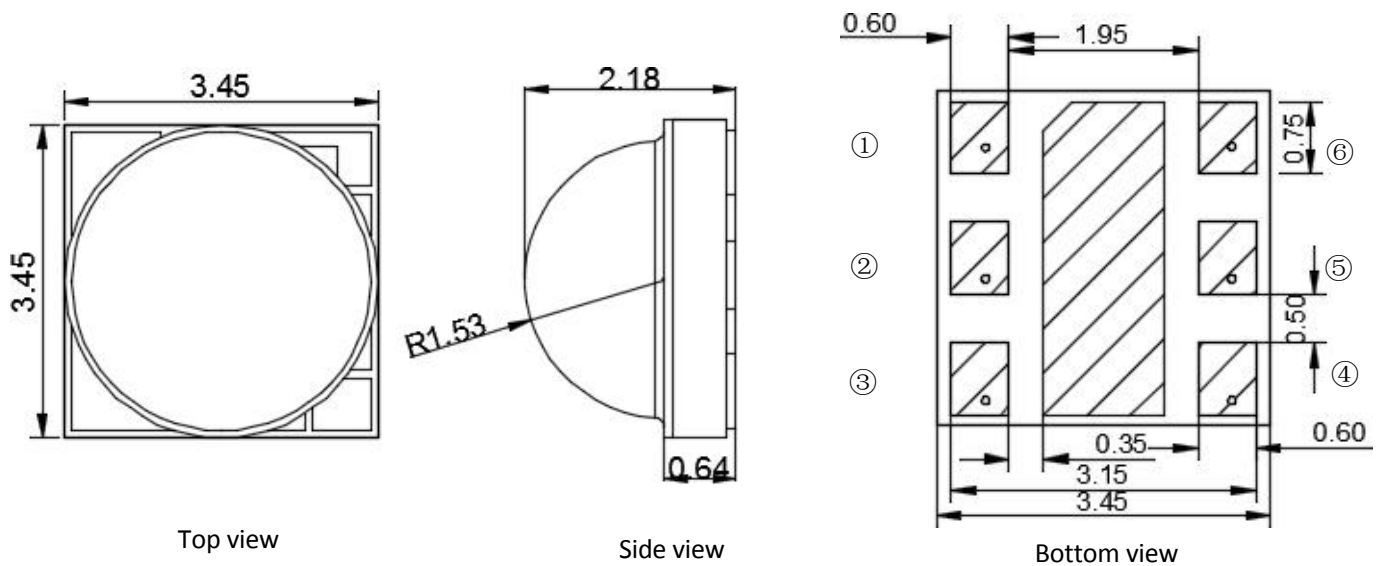
Flux specification

Color	Flux	Min	Max	Unit
Blue (B)	B	15	50	lm
Red (R)	C	40	80	lm
Green (G)	D	70	90	lm
	E	90	110	lm
	F	110	130	lm

specifications

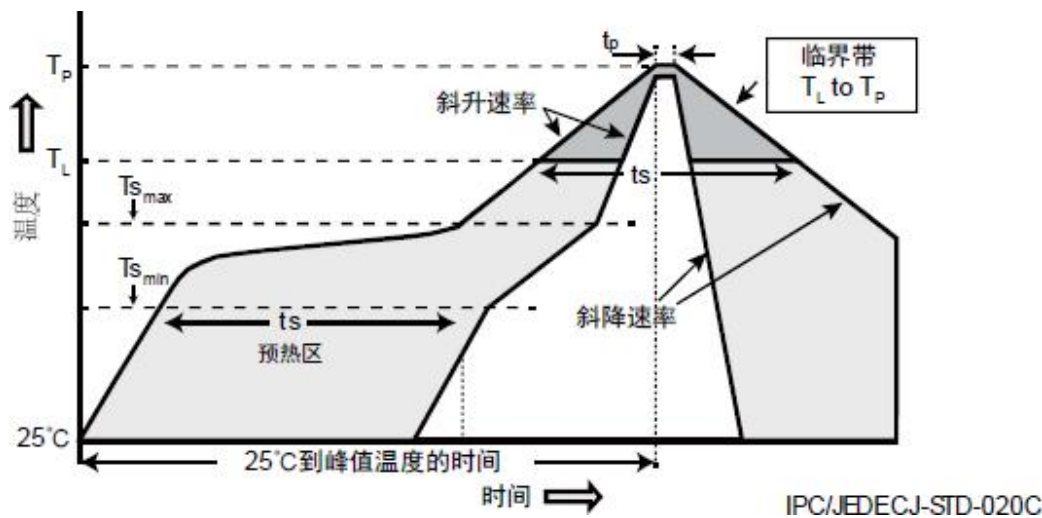
Color	Group	Flux(lm)	DWL/ChromaticityBins
Red	C	40-80	R1、R2、R3
Green	D	70-90	G1、G2、G3
	E	90-110	
	F	110-130	
Blue	B	15-50	B1、B2、B3、B4、B5

Mechanical Dimensions :

Unit: (m m) Tolerance : ± 0.1 

Recommend PCB Solder Pad

Recommend Reflow Profile



Profile Feature	Lead-Based Solder	Lead-Free Solder
Average Ramp-Up Rate (Ts _{max} to T _p)	3°C/S Max	3°C/S Max
Preheat: Temperature Min (Ts _{min})	100°C	150°C
Preheat: Temperature Max (Ts _{max})	150°C	200°C
Preheat Time (Ts _{min} to Ts _{max})	60-120S	60-180S
Time Maintain Above: Temperature (T _L)	183°C	217°C
Time Maintain Above: Time (t _L)	60-150S	60-150S
Peak/Classification Temperature (T _p)	215°C	260°C
Time within 5°C of Peak Temperature (t _p)	10-30S	20-40S
Ramp-Down (T _p to T _L)	6°C/S Max	6°C/S Max
Time 25 °C to peak Temperature	6min. Max	8min. Max

Notes:

- 1..the temperature distribution characteristics reference to IPC/JEDECJ-STD-020C.
- 2. Moisture sensitivity level 1 (MSL1) .

Package quantity (1000pcs) /reel

Unit: (mm) Tolerance : ± 0.1

