1. Application

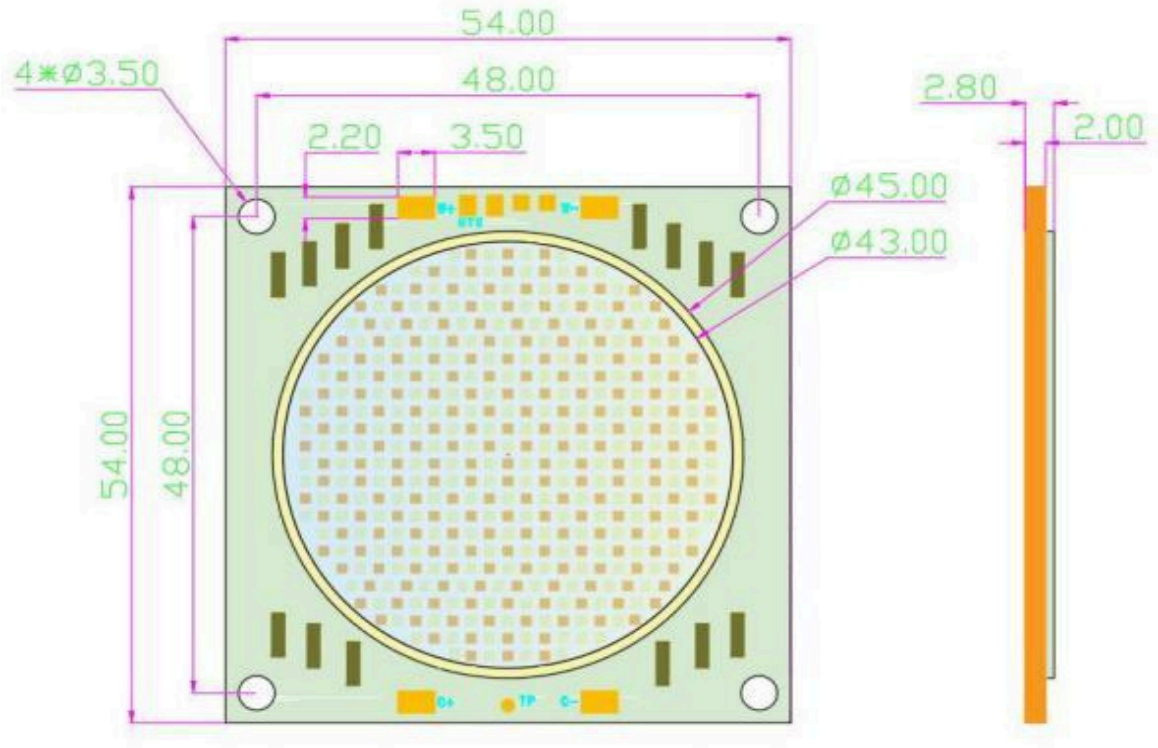
This datasheet applies only to modelWLS-5454-600W bicolor white light emitting diode module.

1.1 Specificities

- High luminous efficacy, high apparent index, ultra-long luminous flux maintenance rate
- Exterior size: 54mm×54mm×1.5mm
- Luminous surface: 43mm
- Luminous angle: 120°.
- ROHS compliant
- Suitable for manual soldering

1.2 Main uses: movie and television lighting

2. External dimensions



Unit： mm All unmarked tolerances are: +-0.2mm Base plate material: copper substrate

3. Levels and Characteristics:

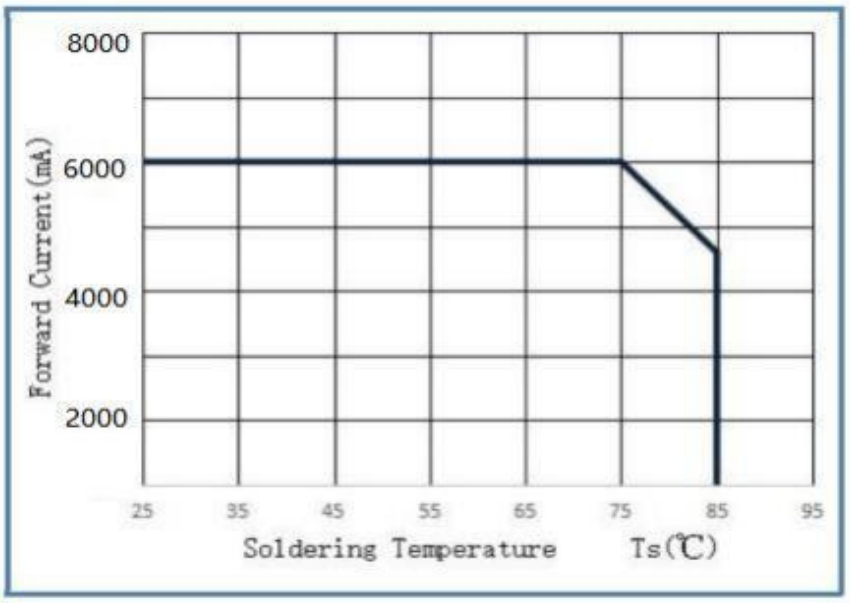
3-1. Absolute Maximum Level

Item	Notation	Value	Unit
Limit power	P	300*2	W
Forward DC Current	IF	6000*2	MA
Reverse DC Voltage	V_R	50	V
Operating Temperature	T_{OPR}	-30~+60	℃
Storage Temperature	T_{STG}	-35~+100	℃
Static Charge Limit	ESD	2000	V
CRI	Ra	95	/
Viewing Angle	$2\theta_{1/2}$	120	Deg

Description: 1. Limit power and forward current are the maximum set values for the module temperature through the use of a suitable heat sink. 2. Initially connecting the wrong reverse voltage beyond the will possibly damage the module. 3. Different temperatures (temperature test points) indicate that the module should follow a degradation curve. (temperature test points) indicates that the module should be operated according to the degradation curve of the

3-2. Degradation curves:

Note: In order to keep temperatures below rated, it is necessary to make sure that the heat sink has sufficient cooling performance.



3-3. Initial Electrical/Optical Characteristics (Ta=25℃):

	Symbol	W	Unit
工作电流 Forward current	If	5800	mA
	Φvw	21400-24800	lm
	Φvc	24600-27600	lm
显色指数 CRI	Ra (min)	≥95	
色温 Coior Temperaeure	CCT	3000 5700	k
	△	200	k
工作电压 Forwars Voltage	VFmin	43	v
	VF	47	v
	VFmax	50	v

Note 1: All ratings are based on operation with a constant LED-PCBA temperature Tb = 40°C.。

Note 2: Total flux from emitting area at typical dominant wavelength。

Note 3: Color Rendering Index (CRI) can be customized。

Note 4: Color Temperature can be customized。

3-4. Absolute maximum rating:

	Symbol	LED	Unit
Recommended Driving Current	I(Rec)	5800*2	mA
Maximum Current	Ia(max)	6000*2	mA
Peak Inverse Voltage	VR(mas)	50	V
Reverse Leakage Current	I(max)	100	UA
Storage Temperature Range	T	-40to125	℃
Operating Junction Temperature	Tj	115	℃
Maximum Junction Temperature	Tj(max)	125	℃

Attention:

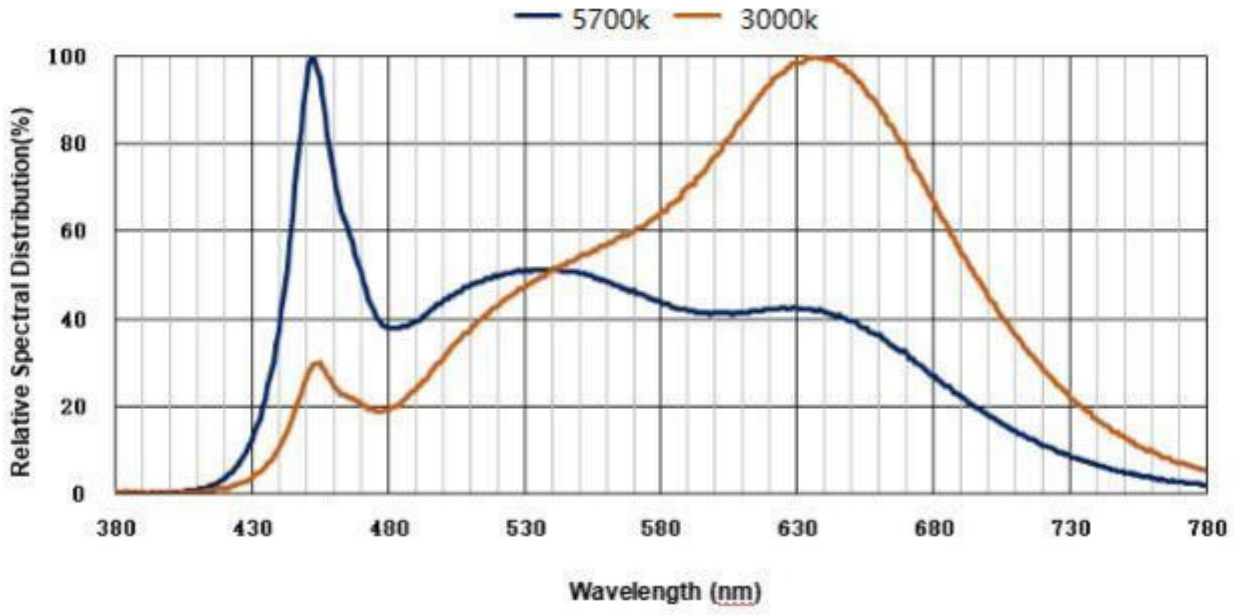
1. Test ambient temperature 25 ℃, if the use of different current or different ambient temperature test, will cause color temperature and voltage changes.

2. Different standard tester normal test tolerance: voltage ± 3%, lumens ± 10%, the apparent finger ± 2, color coordinates ± 0.005.

3. Color gamut can be controlled in the color temperature center coordinates of the 4-6 orders within the McAdam ellipse.

3-5. Characterization Chart(TYP) (TYP)

3-5. 1 Spectral energy characteristic curve :



3-5. 2 Luminous flux distribution