YUJILEDS

LED Matrix Solution

Introduction & Datasheet

Feature

- High power density LED matrix
- 95+ CRI (white light)
- Accurate chromaticity, up to 2.5nm wavelength tolerance (single color)
- Full line-up color / CCT options
- Flexible layout design for customization

Application

- Stage / Entertainment lighting
- Effect / Accent lighting
- Photographic / Film / studio lighting
- Architectural lighting

About Yujileds®

Rev Version: V1.2

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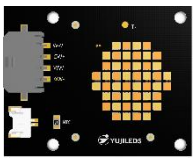
(All-in-One)

Pending

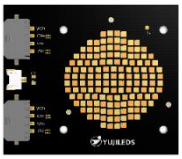
Specification

(Chip-on-Board bicolor / Rated 100W; Max 240W / Bicolor)



Specification

(Chip-on-Board bicolor / Rated 300W; Max 720W / Bicolor)



Specification

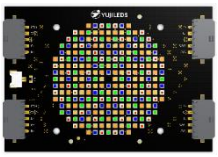
(Chip-on-Board bicolor / Rated 500W; Max 1440W / Bicolor)

Specification

(Chip-on-Board / Rated 200W; Max 550W / RGBWW)

Specification

(Chip-on-Board / Rated 500W; Max 1200W / RGBWW)



Specification

(LED componant)

About Yujileds

Introduction

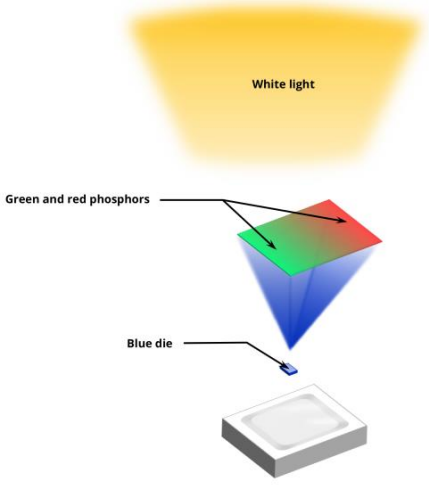
Yujileds® Matrix aims to provide high-density illumination with high-performance white, tunable-white light and full-color lighting options for a variety of applications that require focusing light, accurate chromaticities and excellent color rendition. The Matrix is developed based on the purpose of simplifying the optical design with the small Light Emitting Surface (LES) to accomplish the spectra mixing.

Compared to a standard LED COB or module, the Yujileds® Matrix module has the features below:

- Yujileds® high CRI LED technology & enhanced R9
- Accurate chromaticity control
- PC-red technology
- Full-color gamut coverage
- Spectrum recipe design
- Custom and module design

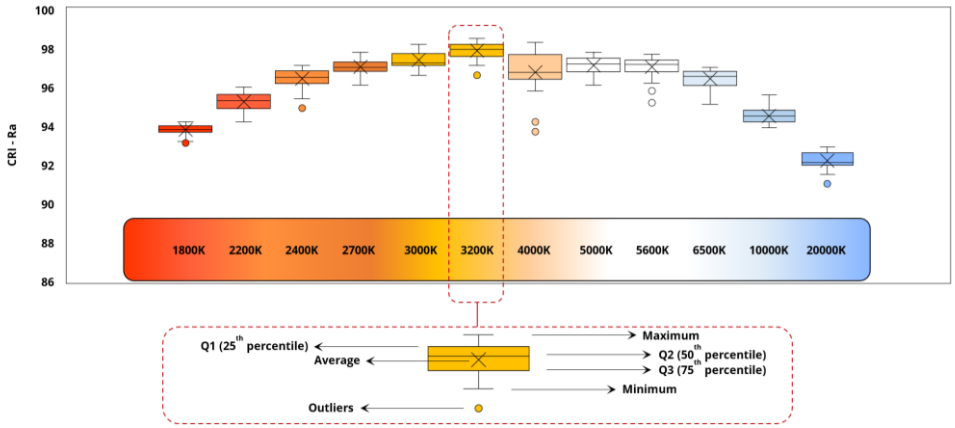
Features

Yujileds® high CRI LED technology & enhanced R9



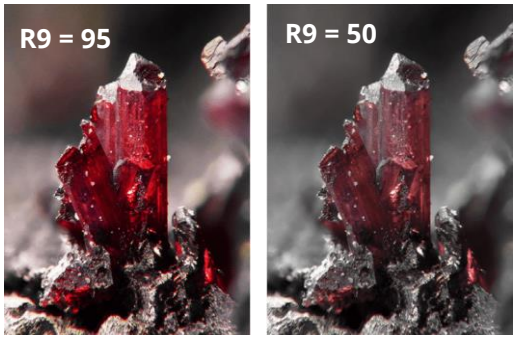
Yujileds® high CRI LED is based on the efficient blue (typical 450nm) die, mixing with Yuji

advanced phosphors and specifically designed spectral recipes. Although there are more and more nominal “high CRI LED” on the market, after relevant tests and analyses, it is proud to say that we are still one of the top performance, most consistent and stable products on the color rendering. We have been provided the full statistic and data support from the production of 1,000,000pcs of each CCT from 1800K to 20000K, and present all characteristics and guidance to make reliable simulation and prediction accordingly. Achieving typical Ra 97 and minimum Ra 95, the stability and consistent quality in mass production are verified by statistical identification.



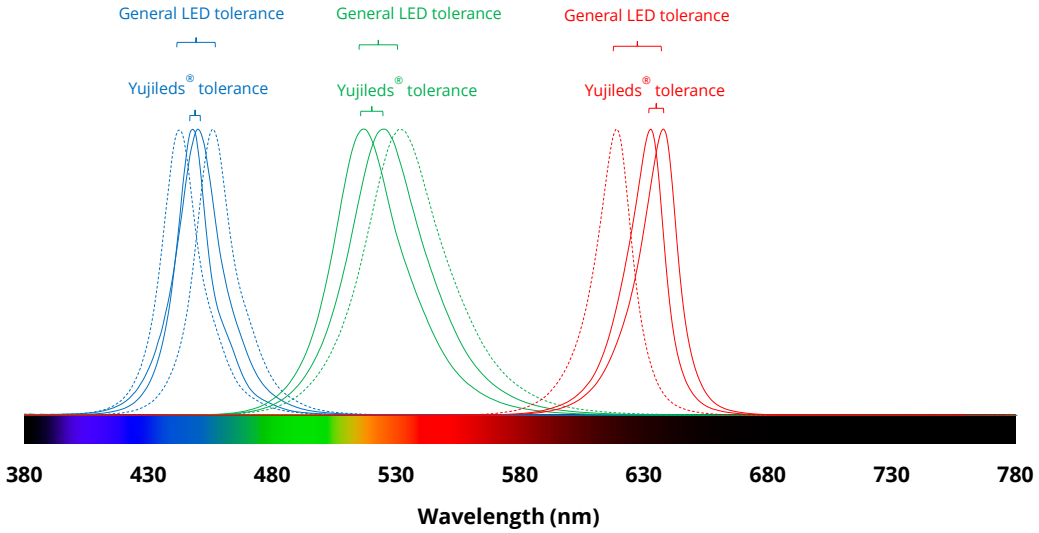
The standard CRI Ra is the average score of the first eight Test Color Samples (TCS), where the 9th for saturated red color is missed. However R9 is significantly different for different light sources. In the spectral analysis and CRI arithmetic, the integral area between the spectrum and the spectral reflectance response of TCS-9 decides the R9 to a large extent – in other words, how much of TCS-9 spectra reflectance is overlaid in the light source spectrum, that is a key factor. With Yujileds® advanced phosphor material and recipes, the R9 is far better than fluorescent and standard LED, almost the same outstanding as halogen.

Light source	R9
Halogen (2865K)	99
Fluorescent (3000K)	-27
Standard LED (3000K)	13
Yujileds® high CRI LED (2700K)	96



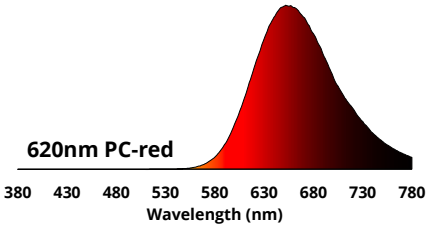
Accurate chromaticity control

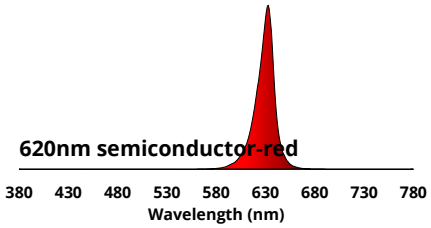
For specific applications such as entertainment or architectural lighting, color consistency and stability are extremely important and are affecting the value of the product. However, the wavelength tolerance of general LEDs is quite abroad that generates the consistency risk, in comparison, Yujileds® Matrix offers up to 2.5nm binning, securing the tolerance to a great extent.



PC-red technology

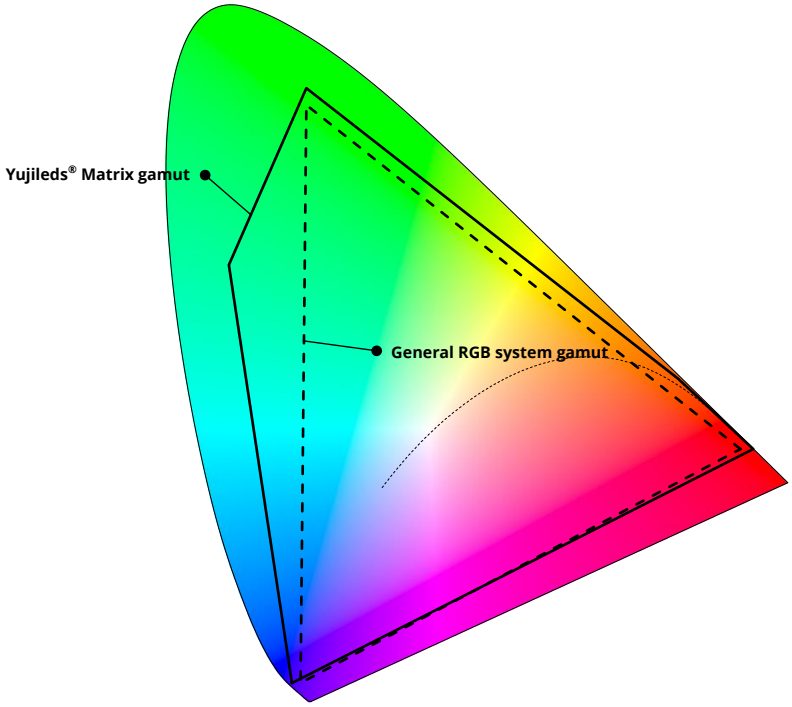
Yuji is well-known for its stable and high-brightness nitride red phosphor, in the Yujileds® Matrix, we develop a red phosphor-converted LED achieving both saturated red color and abroad spectrum. The significance of PC-red is to create pure red with the same dominant wavelength of a semiconductor red LED and keep high CRI when mixing with white light or R/G/B/A system which cannot be feasible for the semiconductor-red LED. In the Yujileds® Matrix line, both PC-red and semiconductor red are prepared for different needs.



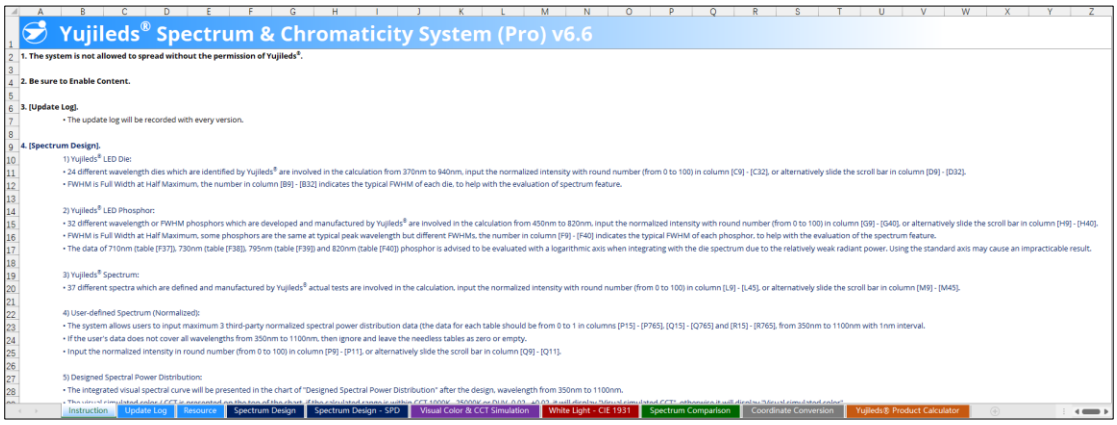


Full-color gamut coverage

Compared to a general RGB system, Yujileds® Matrix provides richer color gamut coverage significantly, which enables the possibility to create more colors by appropriate tuning programs. This is especially meaningful for film and stage lighting that the lighting designer and director could get more tints to create different lighting environments.



Spectrum recipe design



Users can get the support of Spectrum & Chromaticity System (Pro) which is developed by Yuji scientists on the Yujileds® LED Matrix Solution. It is a comprehensive and fully-functional tool compared to the simple online version. Built-in Microsoft Excel for universality, users do not need to install extra software but can provide many rich functions including but not limited to the listed below:

- User designed LED spectra and relevant calculation data;
- Visual color & CCT simulation;
- White light chromaticity analysis;
- Spectrum comparison;
- Coordinate convention.

Custom and module design

Module design and custom are important parts of what we do. In different and complex projects, we have been helped our clients with solving the tasks of chromaticity, spectrum, thermal control and specification make. With years of experience focusing in module customization, we encourage to contact us if the items below are critical for your projects:

- Particularly care about the optical performance of the final luminaire;
- Know well or don't understand the features and discrepancy between the individual LED and integrated module, but it is challenging to solve and control the consistency issues with balanced cost performance by yourself;
- Need serious specifications for exact calculation to secure the reliable and stable performance of the luminaire;
- Focus on the product's duration, plan to upgrade timely, and need to track the historical data as references;
- Plan to run the confidential projects without disclosing any key information of know-how to the markets;
- Need professional consultancy in both technical and industrial ways, especially regarding the interaction between optics and electronics and precise control;

- Need professional test report, control and analysis for every batch of the module;
- Need stable supplied materials up to 10 years no-change.

Product line

The design concept of the Matrix module has 2 methods for different lighting design purposes:

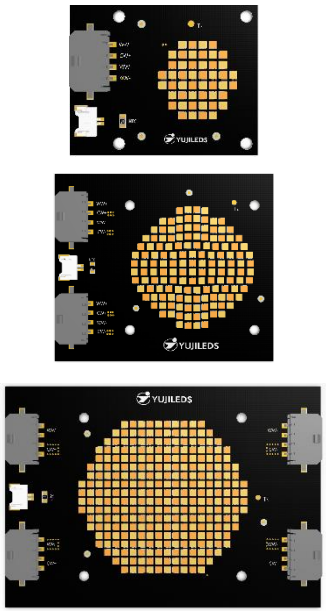
All-in-One

The "All-in-One" LED includes 5 colors and white light as the primaries in a compact package of 7.0mm×7.0mm size (name as 7070H)., it is the closest LED to a point light source but with rich and comprehensive spectrum mixing recipes, each LED package is an individual light source that can achieve full-color functions. The "All-in-One" LED can reach a saturated color gamut in the CIE diagram and excellent white light with accurate chromaticity coordinates. The 7070H LED package with different colors/CCTs is defined as listed below.

LED	Available options		Dominant wavelength / CCT
		Blue	455nm
		Cyan	495nm
		Green	525nm
		PC-lime	550nm
		PC-amber	595nm
		PC-red	620nm
		Red	620nm
		Warm white	2700K
		Daylight white	6500K
	-	Custom	Custom

Chip-on-Board module

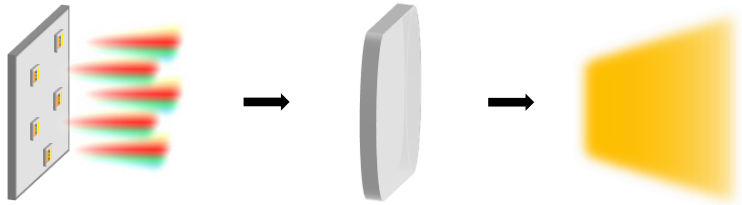
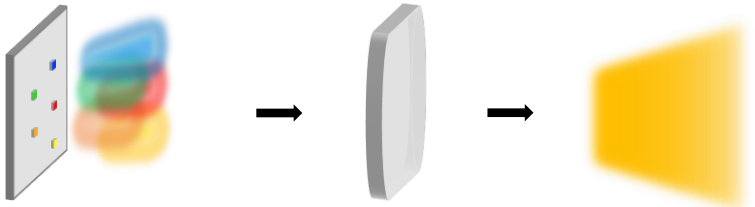
Compared to the "All-in-one" LED, the "Chip-on-Board" LED module organizes different colors in a CoB style and is more flexible to define different layout designs with more color options. The whole "Chip-on-Board" module is the unit light source that each color on it will be collocated with the adjacent to accomplish the spectra mixing. Different CCTs/colors are defined as the standards on the "Chip-on-Board" as listed below, with 2.0mm×2.0mm size.

Module	LED component	Available options		Dominant wavelength / CCT
			Blue	455nm
			Cyan	495nm
			Green	525nm
			PC-lime	550nm
			PC-amber	595nm
			PC-red	620nm
			Red	620nm
			Warm white	2700K
			Daylight white	6500K
-	-		Custom	Custom

Applied on the board, the colors can be mixed sufficiently after the optics or reflector thus the “Chip-on-Board” is the final point light source.

Comparison

The “All-in-One” and “Chip-on-Board” present different features thus they lead to different design paths. The different structure makes the optical, electrical and thermal designs differently, solutions would depend on the specific products accordingly.

All-in-One	 Light source Diffuser & Optical lens Light
Chip-on-Board module	 Light source Diffuser & Optical lens Light

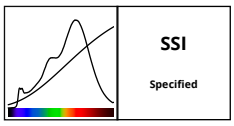
Special features

Yujileds® LED Matrix also provides the specification or support described below:

Yujileds® Spectrum & Chromaticity System (Pro) support
Comprehensive and full-functional tool for spectrum design and chromaticity analysis, built-in Microsoft Excel for universality.

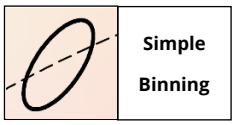
TM-30 specification (white light)
The most advanced colorimetric for color rendition, widely recognized as the successor of CRI.

TLCI specification (white light)
Based on the Macbeth ColorChecker, for evaluating the colorimetric quality of the broadcast lighting.



SSI specification (2700K & 6500K)

For evaluating the rendering quality of light sources in motion picture application based on ISO standard 7589.



SimpleBinning specification

Simplify the chromaticity binning with TrueChroma data support to provide the most economical, simple, and practical solution to customers.

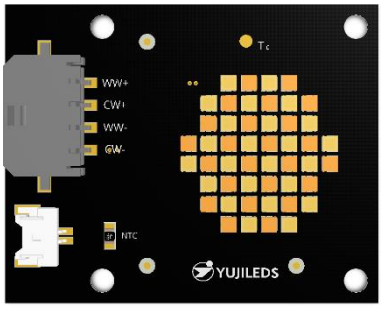
Specification

(All-in-One)

Pending

Specification

(Chip-on-Board bicolor / Rated 100W; Max 240W / Bicolor)



Ordering information

PRODUCT CODE	CCT	CHROMATICITY BINS
B3220001.26	● 2700K	27L, 27R
	○ 6500K	65L, 65R

Characteristics

LED electrical-optical characteristics (T_A = 25°C, 1400mA, rated power)

PARAMETER	SYMBOL	VALUE			UNIT	TOLERANCE
		MIN.	TYP.	MAX.		
Forward voltage	V_F	33	-	41	V	-
Luminous flux	● Φ_{2700K}	-	3100	-	lm	-
	○ Φ_{6500K}	-	3900	-		
Correlated color temperature(1)	● CCT_{2700K}	2540	2700	2860	K	-
	○ CCT_{6500K}	6000	6500	7000		
Color rendering index	Ra	95(2)	-	-	-	±1
TCS R9 (CRI red)	R9	-	90	-	-	-
Fidelity index(3)	Rf	-	92	-	-	-
Gamut index(3)	Rg	-	100	-	-	-
TLCI 2012(4)	-	-	97	-	-	-
SSI(5)	SSI_{2700K}	-	87	-	-	-
	SSI_{6500K}	-	67	-	-	-
Reverse current	I_r	-	-	10	μA	±0.1 (V_r = 5V)
View angle	$2\theta_{1/2}$	-	120	-	Deg	±5
Thermal resistance(6)	$R_{\theta JS}$	-	0.7	-	°C/W	-

(1). Yujileds® promises the chromaticity coordinate tolerance of ±0.0015 (CIE 1931 x,y) based on Yuji standard equipment shall prevail.
(2). Typical Ra = 95 at 6500K.
(3). Defined by the IES TM-30-18 method, this data is for trial.
(4). Defined by the EBU, TLCI is the abbreviation of Television Lighting Consistency Index, this data is for trial.
(5). Defined by the Academy of Motion Picture Arts and Sciences, this data is for trial.
(6). This data is for reference only.

Characteristics

Absolute maximum ratings (T_A = 25°C)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	120	W
DC Forward Current (pulsed)(1)	I_{Fp}	3.2(2)	A
DC Forward Current	I_F	3.0	A
Reverse Voltage	V_R	60	V
Case Temperature(3)	T_s	105	°C

(1). Pulse width ≤ 0.1ms, duty ≤ 1/10.

(2). Theoretical data.

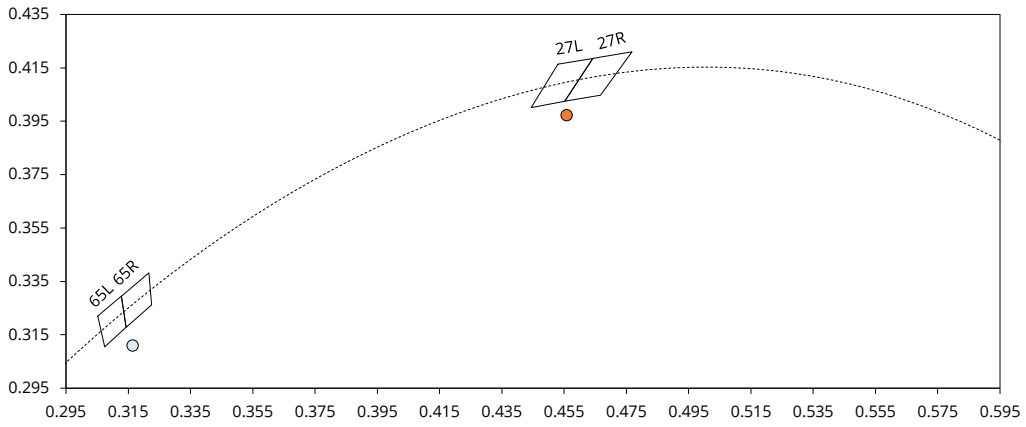
(3). See page **Mechanical dimension**.

Chromaticity group and diagram

Chromaticity bins & coordinates

CCT / COLOR	BIN	CIE 1931 COORDINATES							
		X0	Y0	X1	Y1	X2	Y2	X3	Y3
● **2700K**	27R	0.4642	0.4185	0.4552	0.4025	0.4667	0.4047	0.4768	0.4210
	27L	0.4530	0.4164	0.4444	0.4001	0.4552	0.4025	0.4642	0.4185
○ **6500K**	65R	0.3128	0.3295	0.3143	0.3178	0.3225	0.3262	0.3216	0.3382
	65L	0.3052	0.3220	0.3074	0.3105	0.3143	0.3178	0.3128	0.3295

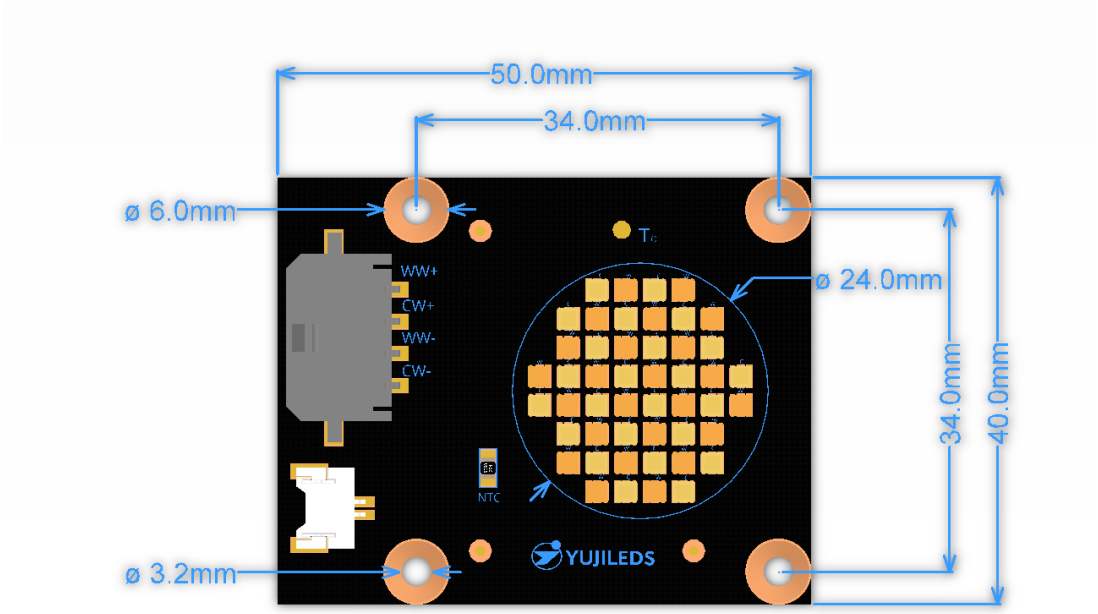
CIE 1931 diagram



Mechanical dimension

Package layout

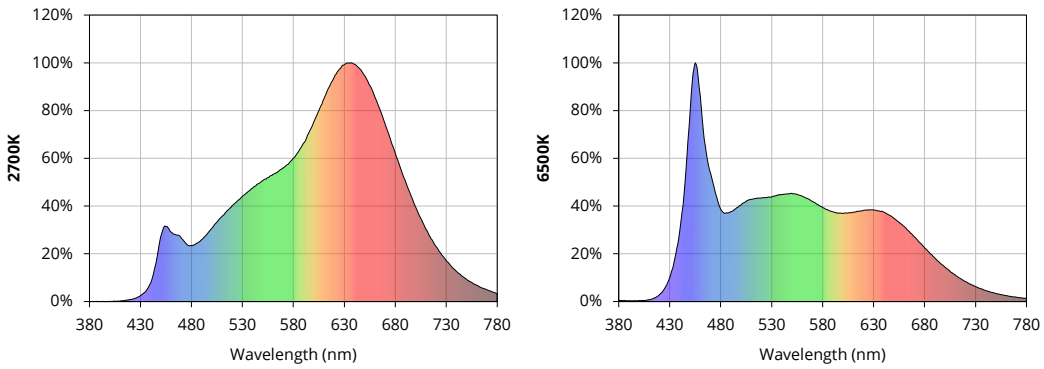
All dimensions in mm, tolerance unless mentioned is ±0.1mm.



Characteristic graph

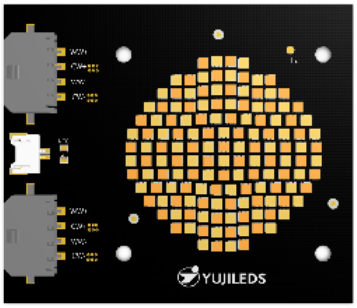
Typical spectral power distribution (normalized)

All characteristic curves are for reference only and not guaranteed.



Specification

(Chip-on-Board bicolor / Rated 300W; Max 720W / Bicolor)



Ordering information

PRODUCT CODE	CCT	CHROMATICITY BINS
B3220003.26	● 2700K	27L, 27R
	○ 6500K	65L, 65R

Characteristics

LED electrical-optical characteristics (T_A = 25°C, 4000mA, rated power)

PARAMETER	SYMBOL	VALUE			UNIT	TOLERANCE
		MIN.	TYP.	MAX.		
Forward voltage	V_F	33	-	41	V	-
Luminous flux	● Φ_{2700K}	-	10800	-	lm	-
	○ Φ_{6500K}	-	13800	-		
Correlated color temperature(1)	● CCT_{2700K}	2540	2700	2860	K	-
	○ CCT_{6500K}	6000	6500	7000		
Color rendering index	Ra	95(2)	-	-	-	±1
TCS R9 (CRI red)	R9	-	90	-	-	-
Fidelity index(3)	Rf	-	92	-	-	-
Gamut index(3)	Rg	-	100	-	-	-
TLCI 2012(4)	-	-	97	-	-	-
SSI(5)	SSI_{2700K}	-	87	-	-	-
	SSI_{6500K}	-	67	-	-	-
Reverse current	I_r	-	-	10	μA	±0.1 (V_r = 60V)
View angle	$2\theta_{1/2}$	-	120	-	Deg	±5
Thermal resistance(6)	$R_{\theta JS}$	-	0.7	-	°C/W	-

(1). Yujileds® promises the chromaticity coordinate tolerance of ±0.0015 (CIE 1931 x,y) based on Yuji standard equipment shall prevail.

(2). Typical Ra = 95 at 6500K.

(3). Defined by the IES TM-30-18 method, this data is for trial.

(4). Defined by the EBU, TLCI is the abbreviation of Television Lighting Consistency Index, this data is for trial.

(5). Defined by the Academy of Motion Picture Arts and Sciences, this data is for trial.

(6). This data is for reference only.

Characteristics

Absolute maximum ratings (T_A = 25°C)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	360	W
DC Forward Current (pulsed)(1)	I_{Fp}	9.6(2)	A
DC Forward Current	I_F	9.0	A
Reverse Voltage	V_R	60	V
Case Temperature(3)	T_s	105	°C

(1). Pulse width ≤ 0.1ms, duty ≤ 1/10.

(2). Theoretical data.

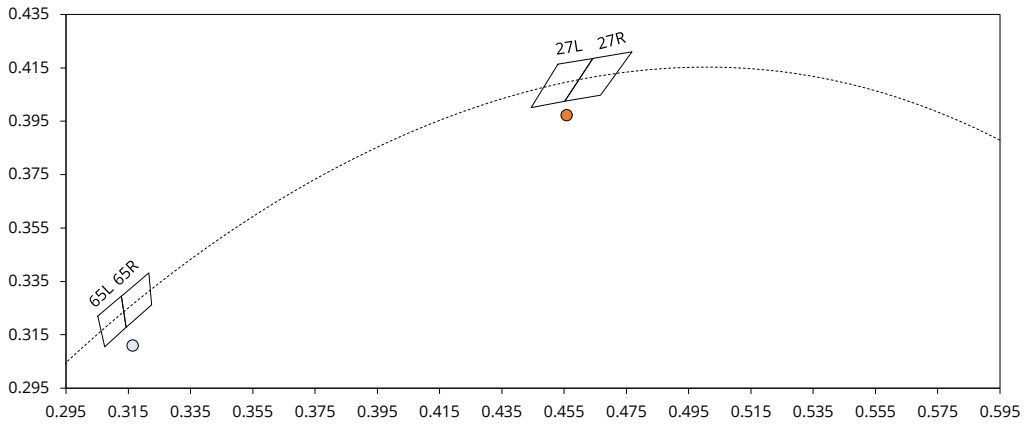
(3). See page **Mechanical dimension**.

Chromaticity group and diagram

Chromaticity bins & coordinates

CCT / COLOR	BIN	CIE 1931 COORDINATES							
		X0	Y0	X1	Y1	X2	Y2	X3	Y3
2700K	27R	0.4642	0.4185	0.4552	0.4025	0.4667	0.4047	0.4768	0.4210
	27L	0.4530	0.4164	0.4444	0.4001	0.4552	0.4025	0.4642	0.4185
6500K	65R	0.3128	0.3295	0.3143	0.3178	0.3225	0.3262	0.3216	0.3382
	65L	0.3052	0.3220	0.3074	0.3105	0.3143	0.3178	0.3128	0.3295

CIE 1931 diagram



Mechanical dimension

Package layout

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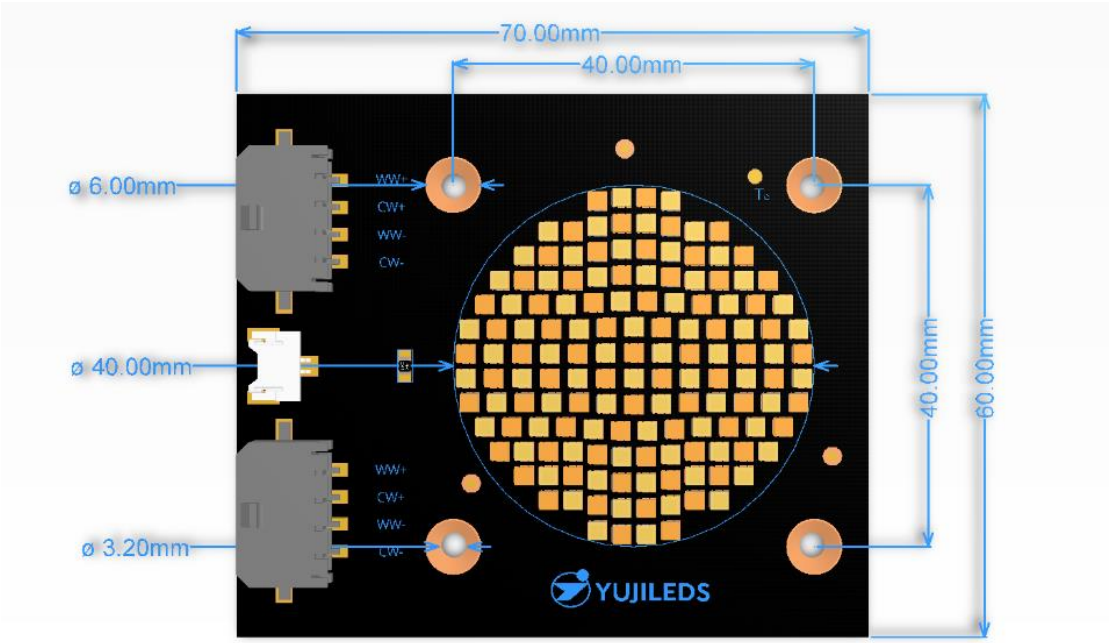

Characteristic graph

Typical spectral power distribution (normalized)

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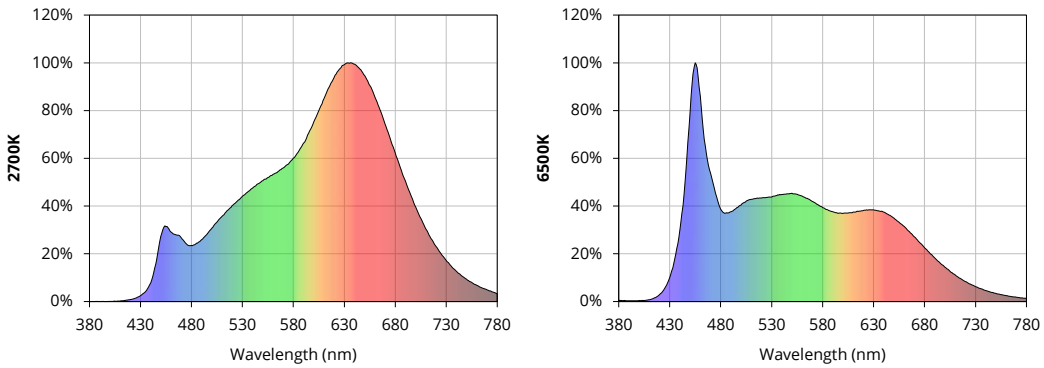


Specification

(Chip-on-Board bicolor / Rated 500W; Max 1440W / Bicolor)

Ordering information

PRODUCT CODE	CCT	CHROMATICITY BINS
B3220005.26	● 2700K	27L, 27R
	○ 6500K	65L, 65R

Characteristics

LED electrical-optical characteristics (T_A = 25°C, 8400mA, rated power)

PARAMETER	SYMBOL	VALUE			UNIT	TOLERANCE
		MIN.	TYP.	MAX.		
Forward voltage	V_F	33	-	41	V	-
Luminous flux	● Φ_{2700K}	-	20000	-	lm	-
	○ Φ_{6500K}	-	25600	-		
Correlated color temperature(1)	● CCT_{2700K}	2540	2700	2860	K	-
	○ CCT_{6500K}	6000	6500	7000		
Color rendering index	Ra	95(2)	-	-	-	±1
TCS R9 (CRI red)	R9	-	90	-	-	-
Fidelity index(3)	Rf	-	92	-	-	-
Gamut index(3)	Rg	-	100	-	-	-
TLCI 2012(4)	-	-	97	-	-	-
SSI(5)	SSI_{2700K}	-	87	-	-	-
	SSI_{6500K}	-	67	-	-	-
Reverse current	I_r	-	-	10	μA	±0.1 (V_r = 60V)
View angle	$2\theta_{1/2}$	-	120	-	Deg	±5
Thermal resistance(6)	$R_{\theta JS}$	-	0.7	-	°C/W	-

(1). Yujileds® promises the chromaticity coordinate tolerance of ±0.0015 (CIE 1931 x,y) based on Yuji standard equipment shall prevail.
(2). Typical Ra = 95 at 6500K.
(3). Defined by the IES TM-30-18 method, this data is for trial.
(4). Defined by the EBU, TLCI is the abbreviation of Television Lighting Consistency Index, this data is for trial.
(5). Defined by the Academy of Motion Picture Arts and Sciences, this data is for trial.
(6). This data is for reference only.

Characteristics

Absolute maximum ratings (T_A = 25°C)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	720	W
DC Forward Current (pulsed)(1)	I_{Fp}	19.2(2)	A
DC Forward Current	I_F	18.0	A
Reverse Voltage	V_R	60	V
Case Temperature(3)	T_s	105	°C

(1). Pulse width ≤ 0.1ms, duty ≤ 1/10.

(2). Theoretical data.

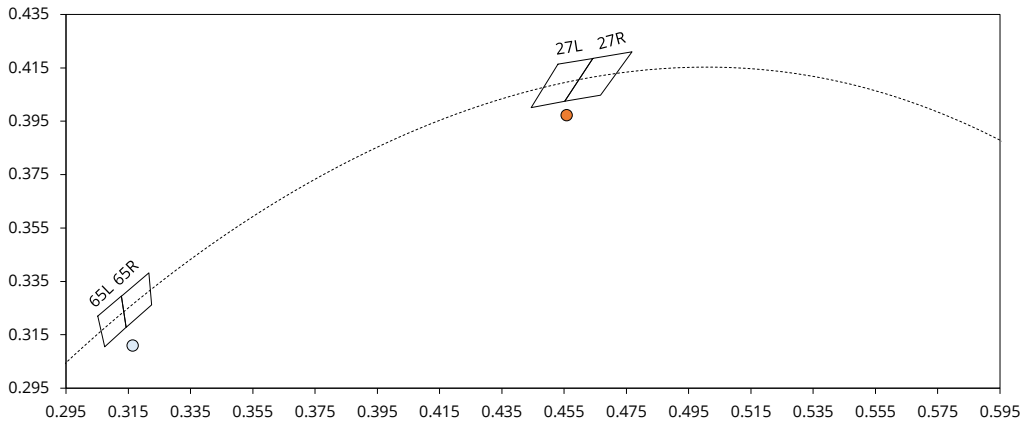
(3). See page **Mechanical dimension**.

Chromaticity group and diagram

Chromaticity bins & coordinates

CCT / COLOR	BIN	CIE 1931 COORDINATES							
		X0	Y0	X1	Y1	X2	Y2	X3	Y3
2700K	27R	0.4642	0.4185	0.4552	0.4025	0.4667	0.4047	0.4768	0.4210
	27L	0.4530	0.4164	0.4444	0.4001	0.4552	0.4025	0.4642	0.4185
6500K	65R	0.3128	0.3295	0.3143	0.3178	0.3225	0.3262	0.3216	0.3382
	65L	0.3052	0.3220	0.3074	0.3105	0.3143	0.3178	0.3128	0.3295

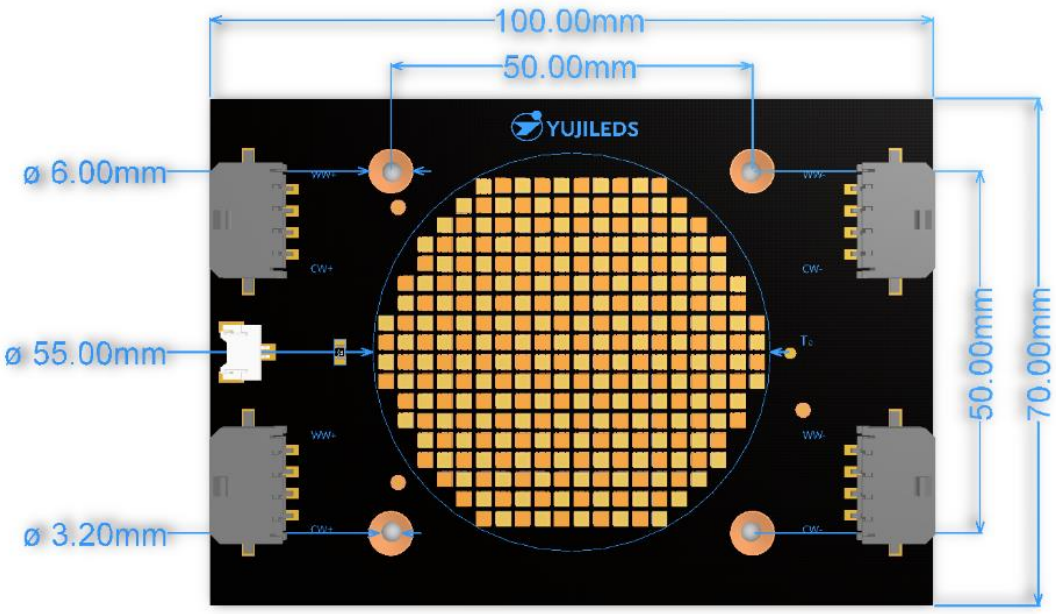
CIE 1931 diagram



Mechanical dimension

Package layout

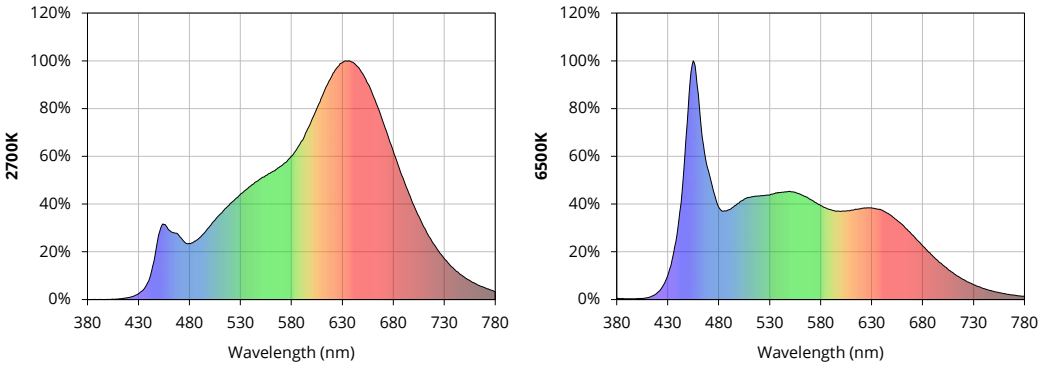
All dimensions in mm, tolerance unless mentioned is ±0.1mm.



Characteristic graph

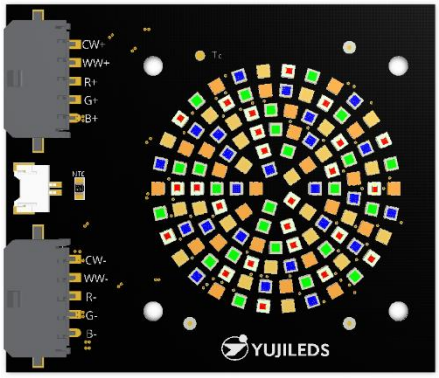
Typical spectral power distribution (normalized)

All characteristic curves are for reference only and not guaranteed.



Specification

(Chip-on-Board / Rated 200W; Max 540W / RGBWW)



Ordering information

PRODUCT CODE	CCT / COLOR	CHROMATICITY BINS / DOMINANT WAVELEGNTH
B3220002.01	2700K	27L, 27R
	6500K	65L, 65R
	Blue	B1
	Green	G1, G2
	Red	R1, R2

Characteristics

LED electrical-optical characteristics (T_A = 25°C, 1400mA, white light, rated power)

PARAMETER	SYMBOL	VALUE			UNIT	TOLERANCE
		MIN.	TYP.	MAX.		
Forward voltage	V_F	33	-	41	V	-
Luminous flux	Φ_{2700K}	-	3600	-	lm	-
	Φ_{6500K}	-	4600	-		
Correlated color temperature(1)	CCT_{2700K}	2540	2700	2860	K	-
	CCT_{6500K}	6000	6500	7000		
Color rendering index	Ra	95(2)	-	-	-	±1
TCS R9 (CRI red)	R9	-	90	-	-	-
Fidelity index(3)	Rf	-	92	-	-	-
Gamut index(3)	Rg	-	100	-	-	-
TLCI 2012(4)	-	-	97	-	-	-
SSI(5)	SSI_{2700K}	-	87	-	-	-
	SSI_{6500K}	-	67	-	-	-
Reverse current	I_r	-	-	10	μA	±0.1 (V_r = 60V)
View angle	$2\theta_{1/2}$	-	120	-	Deg	±5
Thermal resistance(6)	$R_{\theta JS}$	-	0.7	-	°C/W	-

(1). Yujileds® promises the chromaticity coordinate tolerance of ±0.0015 (CIE 1931 x,y) based on Yuji standard equipment shall prevail.

(2). Typical Ra = 95 at 6500K.

(3). Defined by the IES TM-30-18 method, this data is for trial.

(4). Defined by the EBU, TLCI is the abbreviation of Television Lighting Consistency Index, this data is for trial.

(5). Defined by the Academy of Motion Picture Arts and Sciences, this data is for trial.

(6). This data is for reference only.

Characteristics

Electrical-optical characteristics (T_A = 25°C, 1400mA, single color, rated power)

COLOR	PARAMETER	SYMBOL	VALUE			UNIT
			MIN.	TYP.	MAX.	
Blue	**Forward voltage**	V_F	33	-	41	V
	Luminous flux	Φ	-	840	-	lm
	Dominant wavelength(1)	λ_D	455	-	460	nm
	Peak wavelength(1)	λ_P	-	452	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 60V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W
Green	**Forward voltage**	V_F	27	-	35	V
	Luminous flux	Φ	-	4950	-	lm
	Dominant wavelength(1)	λ_D	520	-	535	nm
	Peak wavelength(1)	λ_P	-	520	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 60V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W
Red	**Forward voltage**	V_F	21	-	33	V
	Luminous flux	Φ	-	1800	-	lm
	Dominant wavelength(1)	λ_D	617	-	624	nm
	Peak wavelength(1)	λ_P	-	630	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	20 (V_r = 120V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W

(1). Yujileds® promises the chromaticity coordinate tolerance of ±0.0015 (CIE 1931 x,y) based on Yuji standard equipment shall prevail.

(2). This data is for reference only.

Characteristics

Absolute maximum ratings (T_A = 25°C, white light, blue, green)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	120	W
DC Forward Current (pulsed)(1)	I_{Fp}	3.2(2)	A
DC Forward Current	I_F	3.0	A
Reverse Voltage	V_R	60	V
Case Temperature(3)	T_s	105	°C

Absolute maximum ratings (T_A = 25°C, green)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	100	W
DC Forward Current (pulsed)(1)	I_{Fp}	3.2(2)	A
DC Forward Current	I_F	3.0	A
Reverse Voltage	V_R	60	V
Case Temperature(3)	T_s	105	°C

Absolute maximum ratings (T_A = 25°C, red)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	72	W
DC Forward Current (pulsed)(1)	I_{Fp}	3.2(2)	A
DC Forward Current	I_F	3.0	A
Reverse Voltage	V_R	120	V
Case Temperature(3)	T_s	85	°C

(1). Pulse width ≤ 0.1ms, duty ≤ 1/10.

(2). Theoretical data.

(3). See page Mechanical dimension.

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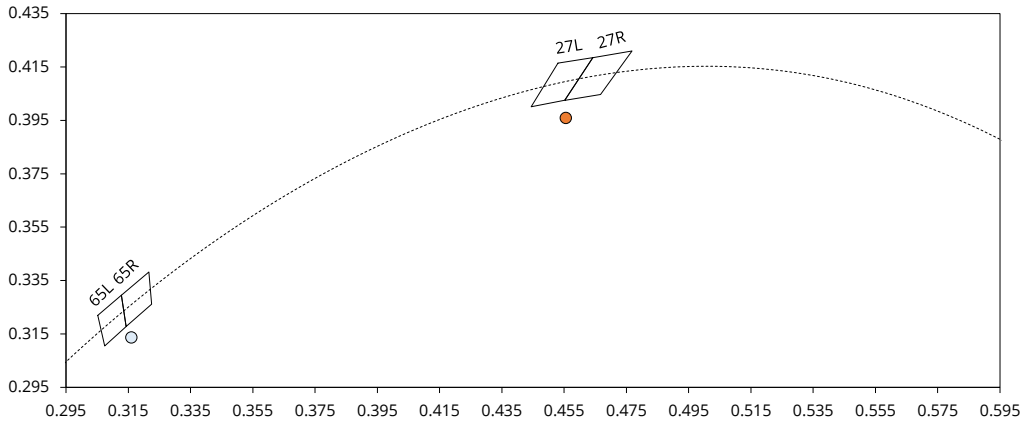
Chromaticity group and diagram

Chromaticity bins & coordinates (TA = 25°C, 1400mA)

CCT / COLOR	BIN	CIE 1931 COORDINATES							
		X0	Y0	X1	Y1	X2	Y2	X3	Y3
● 2700K	27R	0.4642	0.4185	0.4552	0.4025	0.4667	0.4047	0.4768	0.4210
	27L	0.4530	0.4164	0.4444	0.4001	0.4552	0.4025	0.4642	0.4185
○ 6500K	65R	0.3128	0.3295	0.3143	0.3178	0.3225	0.3262	0.3216	0.3382
	65L	0.3052	0.3220	0.3074	0.3105	0.3143	0.3178	0.3128	0.3295

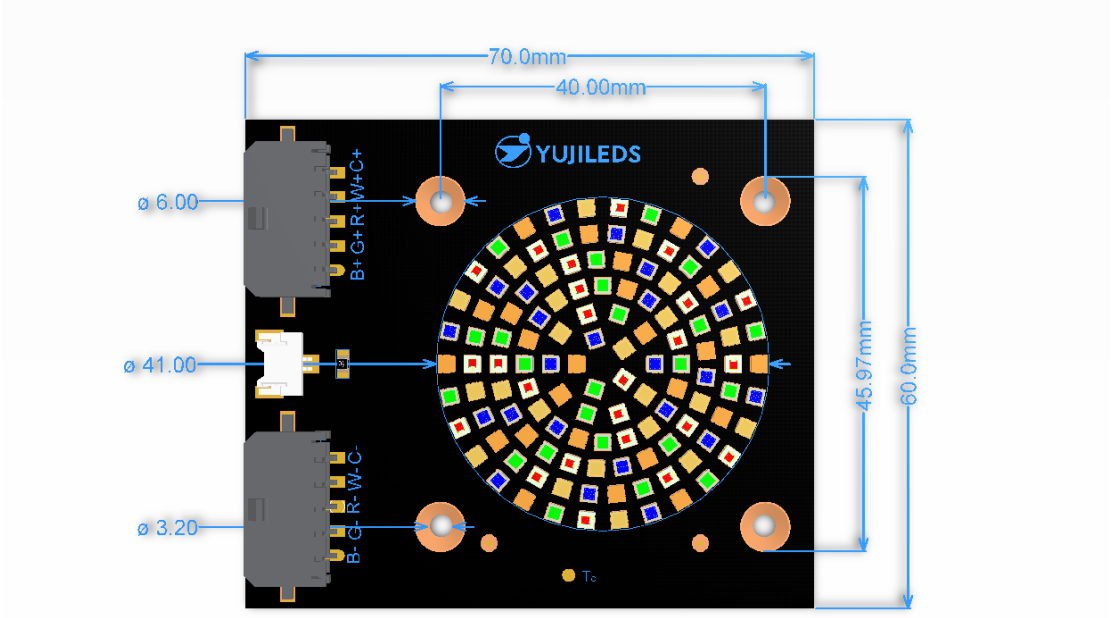
CIE 1931 diagram



Mechanical dimension

Package layout

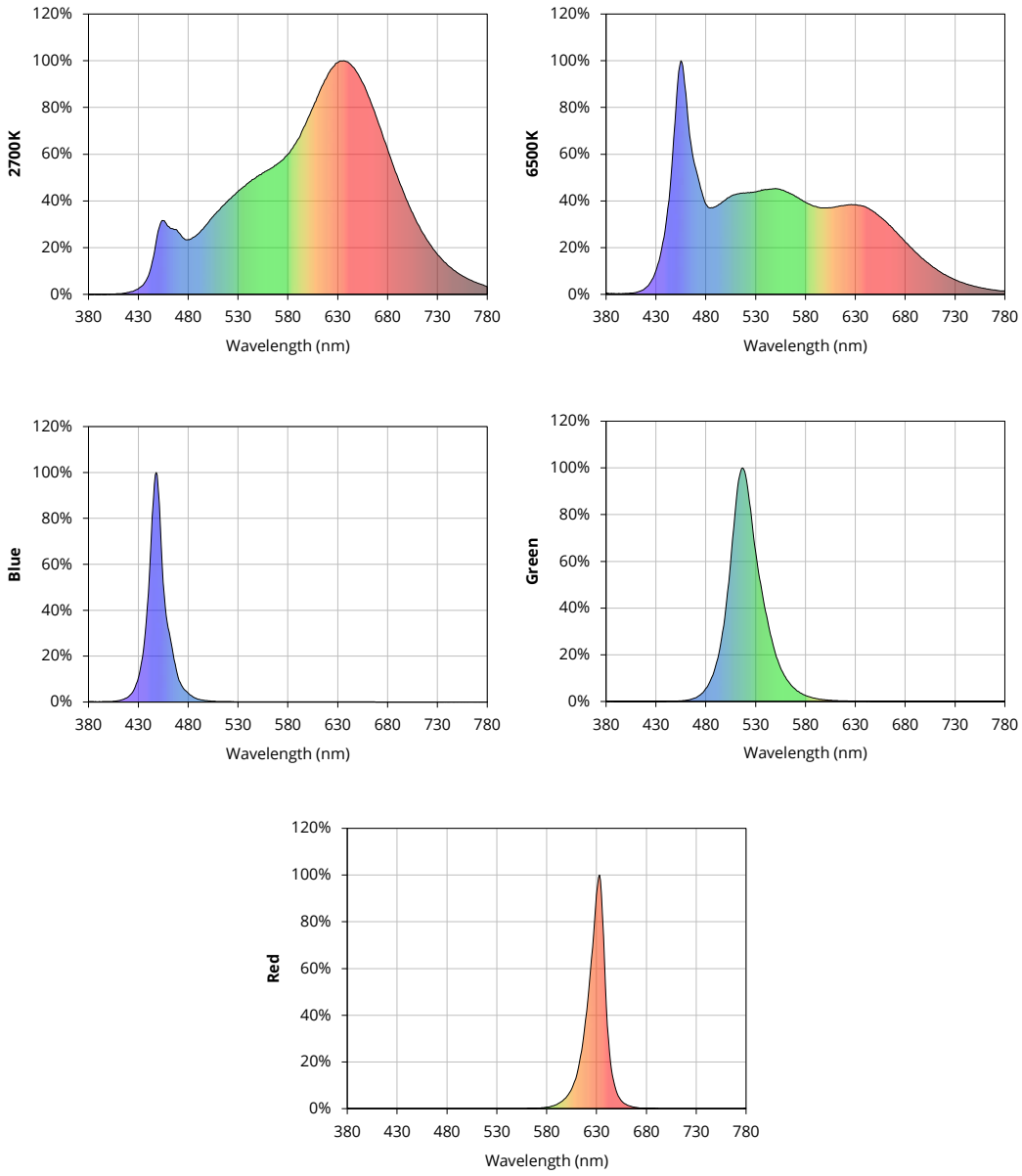
All dimensions in mm, tolerance unless mentioned is ±0.1mm.



Characteristic graph

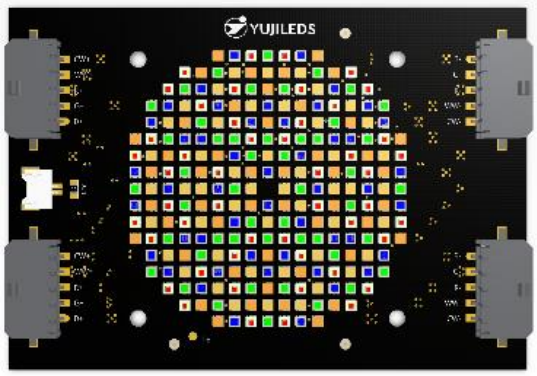
Typical spectral power distribution (normalized)

All characteristic curves are for reference only and not guaranteed.



Specification

(Chip-on-Board / Rated 500W; Max 1050W / RGBWW)



Ordering information

PRODUCT CODE	CCT / COLOR	CHROMATICITY BINS / DOMINANT WAVELEGNTH
B3220004.01	2700K	27L, 27R
	6500K	65L, 65R
	Blue	B1
	Green	G1, G2
	Red	R1, R2

Characteristics

LED electrical-optical characteristics (T_A = 25°C, 2800mA, white light, rated power)

PARAMETER	SYMBOL	VALUE			UNIT	TOLERANCE
		MIN.	TYP.	MAX.		
Forward voltage	V_F	33	-	41	V	-
Luminous flux	Φ_{2700K}	-	6700	-	lm	-
	Φ_{6500K}	-	8600	-		
Correlated color temperature(1)	CCT_{2700K}	2540	2700	2860	K	-
	CCT_{6500K}	6000	6500	7000		
Color rendering index	Ra	95(2)	-	-	-	±1
TCS R9 (CRI red)	R9	-	90	-	-	-
Fidelity index(3)	Rf	-	92	-	-	-
Gamut index(3)	Rg	-	100	-	-	-
TLCI 2012(4)	-	-	97	-	-	-
SSI(5)	SSI_{2700K}	-	87	-	-	-
	SSI_{6500K}	-	67	-	-	-
Reverse current	I_r	-	-	10	μA	±0.1 (V_r = 60V)
View angle	$2\theta_{1/2}$	-	120	-	Deg	±5
Thermal resistance(6)	$R_{\theta JS}$	-	0.7	-	°C/W	-

(1). Yujileds® promises the chromaticity coordinate tolerance of ±0.0015 (CIE 1931 x,y) based on Yuji standard equipment shall prevail.

(2). Typical Ra = 95 at 6500K.

(3). Defined by the IES TM-30-18 method, this data is for trial.

(4). Defined by the EBU, TLCI is the abbreviation of Television Lighting Consistency Index, this data is for trial.

(5). Defined by the Academy of Motion Picture Arts and Sciences, this data is for trial.

(6). This data is for reference only.

Characteristics

Electrical-optical characteristics (T_A = 25°C, 2200mA, single color, rated power)

COLOR	PARAMETER	SYMBOL	VALUE			UNIT
			MIN.	TYP.	MAX.	
Blue	**Forward voltage**	V_F	33	-	41	V
	Luminous flux	Φ	-	1250	-	lm
	Dominant wavelength(1)	λ_D	455	-	460	nm
	Peak wavelength(1)	λ_P	-	452	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 60V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W

Electrical-optical characteristics (T_A = 25°C, 2800mA, single color, rated power, continued)

COLOR	PARAMETER	SYMBOL	VALUE			UNIT
			MIN.	TYP.	MAX.	
Green	**Forward voltage**	V_F	27	-	35	V
	Luminous flux	Φ	-	9000	-	lm
	Dominant wavelength(1)	λ_D	520	-	535	nm
	Peak wavelength(1)	λ_P	-	520	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 60V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W
Red	**Forward voltage**	V_F	21	-	33	V
	Luminous flux	Φ	-	3300	-	lm
	Dominant wavelength(1)	λ_D	617	-	624	nm
	Peak wavelength(1)	λ_P	-	630	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	20 (V_r = 120V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W

(1). Yujileds® promises the chromaticity coordinate tolerance of ±0.0015 (CIE 1931 x,y) based on Yuji standard equipment shall prevail.

(2). This data is for reference only.

Characteristics

Absolute maximum ratings (T_A = 25°C, white light, blue, green)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	240	W
DC Forward Current (pulsed)(1)	I_{Fp}	6.4(2)	A
DC Forward Current	I_F	6.0	A
Reverse Voltage	V_R	60	V
Case Temperature(3)	T_s	105	°C

Absolute maximum ratings (T_A = 25°C, green)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	200	W
DC Forward Current (pulsed)(1)	I_{Fp}	6.4(2)	A
DC Forward Current	I_F	6.0	A
Reverse Voltage	V_R	60	V
Case Temperature(3)	T_s	105	°C

Absolute maximum ratings (T_A = 25°C, red)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	144	W
DC Forward Current (pulsed)(1)	I_{Fp}	6.4(2)	A
DC Forward Current	I_F	6.0	A
Reverse Voltage	V_R	120	V
Case Temperature(3)	T_s	85	°C

(1). Pulse width ≤ 0.1ms, duty ≤ 1/10.

(2). Theoretical data.

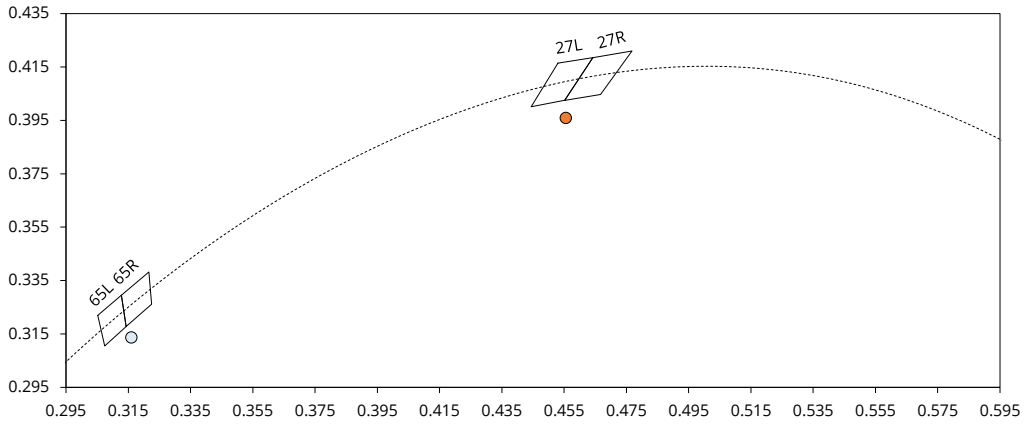
(3). See page Mechanical dimension.

Chromaticity group and diagram

Chromaticity bins & coordinates (TA = 25°C, 1400mA)

CCT / COLOR	BIN	CIE 1931 COORDINATES							
		X0	Y0	X1	Y1	X2	Y2	X3	Y3
2700K	27R	0.4642	0.4185	0.4552	0.4025	0.4667	0.4047	0.4768	0.4210
	27L	0.4530	0.4164	0.4444	0.4001	0.4552	0.4025	0.4642	0.4185
6500K	65R	0.3128	0.3295	0.3143	0.3178	0.3225	0.3262	0.3216	0.3382
	65L	0.3052	0.3220	0.3074	0.3105	0.3143	0.3178	0.3128	0.3295

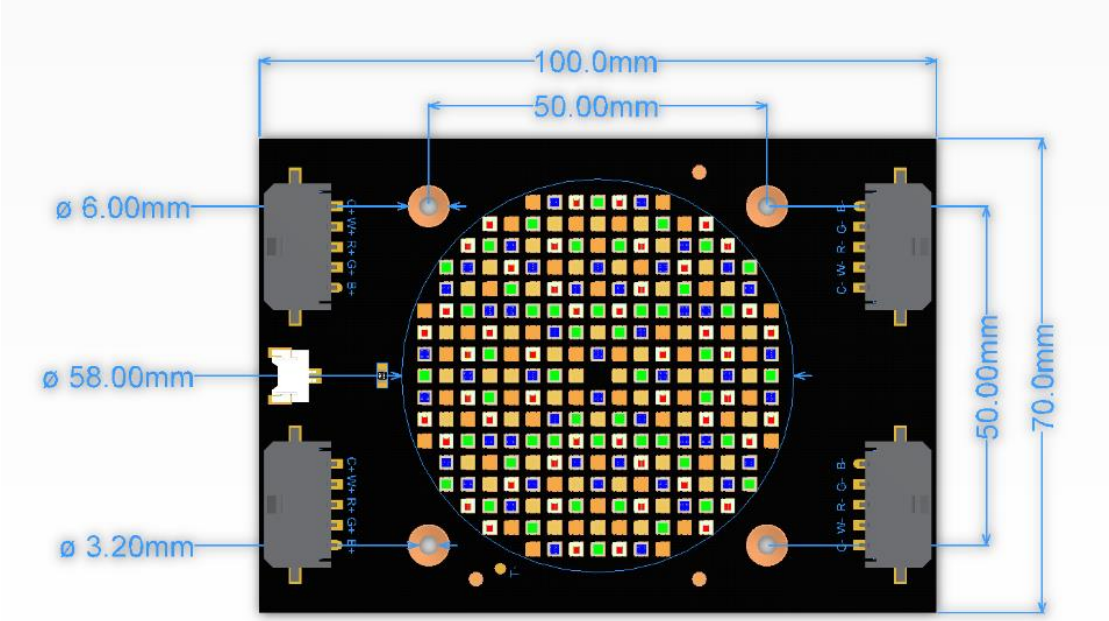
CIE 1931 diagram



Mechanical dimension

Package layout

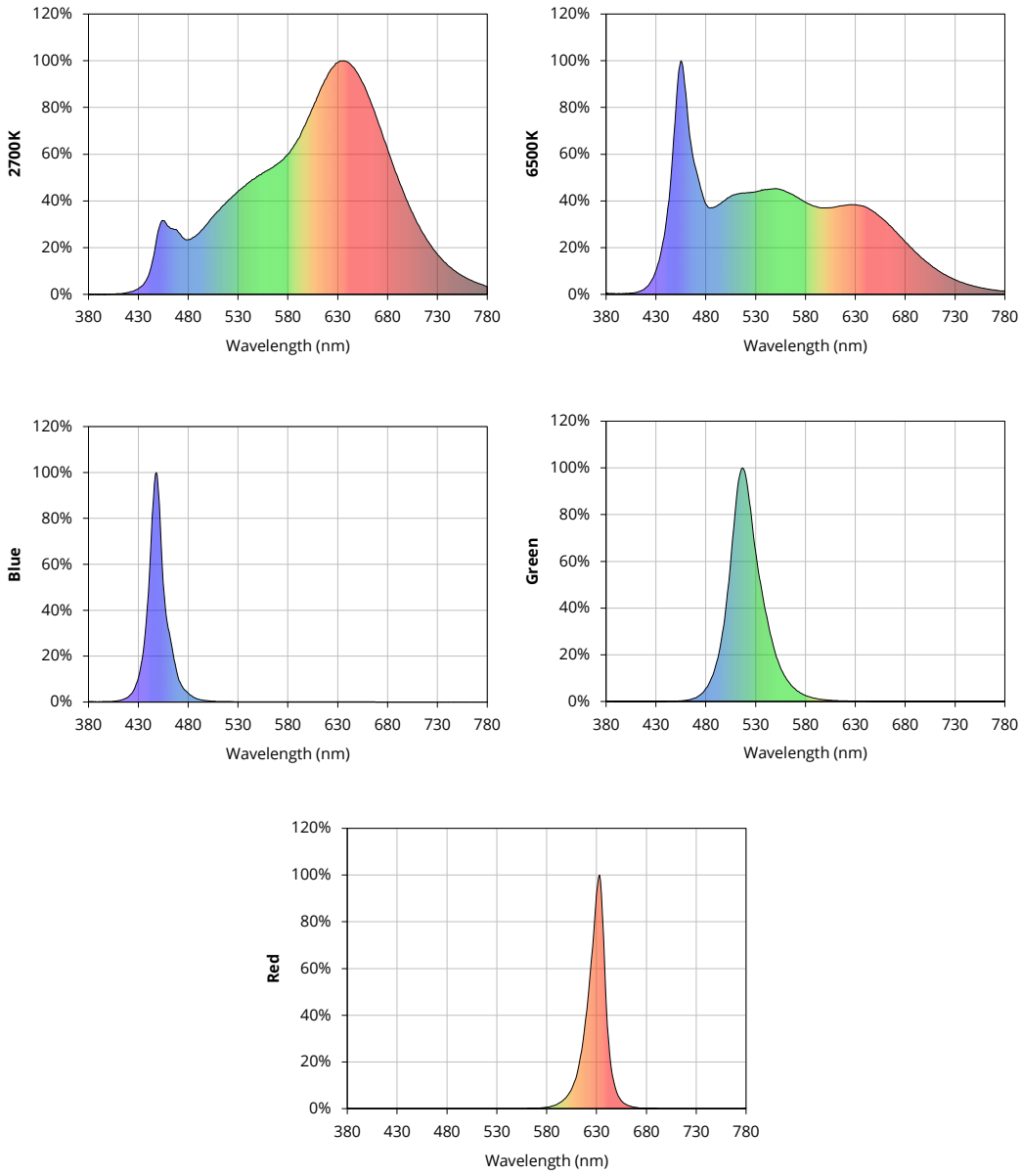
All dimensions in mm, tolerance unless mentioned is ±0.1mm.



Characteristic graph

Typical spectral power distribution (normalized)

All characteristic curves are for reference only and not guaranteed.



Specification

(LED componant)

Ordering information

PRODUCT CODE	CCT / COLOR	CHROMATICITY BINS / DOMINANT WAVELEGNTH	VOLTAGE RANGE
P3220001.27	2700K	27L, 27R	0.2V
P3220001.65	6500K	65L, 65R	0.2V
P3220001.01	Blue	B1	0.2V
P3220001.02	Cyan	C1, C2	0.2V
P3220001.03	Green	G1, G2	0.2V
P3220001.04	PC-lime	PCL1	0.2V
P3220001.05	PC-amber	PCA1	0.2V
P3220001.06	Red	R1, R2	0.2V
P3220001.07	PC-red	PCR1	0.2V
P3220001.XX	- Custom	Custom	0.2V

Characteristics

LED electrical-optical characteristics (T_A = 25°C, 700mA, white light)

PARAMETER	SYMBOL	VALUE			UNIT	TOLERANCE
		MIN.	TYP.	MAX.		
Forward voltage	V_F	2.8	-	3.4	V	±0.05
Luminous flux	● Φ_{2700K}	165	175	185	lm	-
	○ Φ_{6500K}	210	225	240		
Correlated color temperature(1)	● CCT_{2700K}	2540	2700	2860	K	-
	○ CCT_{6500K}	6000	6500	7000		
Color rendering index	Ra	95(2)	-	-	-	±1
TCS R9 (CRI red)	R9	-	90	-	-	-
Fidelity index(3)	Rf	-	92	-	-	-
Gamut index(3)	Rg	-	100	-	-	-
TLCI 2012(4)	-	-	97	-	-	-
SSI(5)	SSI_{2700K}	-	87	-	-	-
	SSI_{6500K}	-	67	-	-	-
Reverse current	I_r	-	-	10	μA	±0.1 (V_r = 5V)
View angle	$2\theta_{1/2}$	-	120	-	Deg	±5
Thermal resistance(6)	$R_{\theta JS}$	-	0.7	-	°C/W	-

(1). Yujileds® promises the chromaticity coordinate tolerance of ±0.0015 (CIE 1931 x,y) based on Yuji standard equipment shall prevail.
(2). Typical Ra = 95 at 6500K.
(3). Defined by the IES TM-30-18 method, this data is for trial.
(4). Defined by the EBU, TLCI is the abbreviation of Television Lighting Consistency Index, this data is for trial.
(5). Defined by the Academy of Motion Picture Arts and Sciences, this data is for trial.
(6). This data is for reference only.

Electrical-optical characteristics (T_A = 25°C, 700mA, single color)

COLOR	PARAMETER	SYMBOL	VALUE			UNIT
			MIN.	TYP.	MAX.	
● **Blue**	**Forward voltage**	V_F	2.8	-	3.4	V
	Luminous flux	Φ	40	-	47	lm
	Dominant wavelength(1)	λ_D	455	-	460	nm
	Peak wavelength(1)	λ_P	-	452	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 5V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W

Characteristics

Electrical-optical characteristics (T_A = 25°C, 700mA, single color, continued)

COLOR	PARAMETER	SYMBOL	VALUE			UNIT
			MIN.	TYP.	MAX.	
Cyan	Forward voltage	V_F	2.5	2.8	3.2	V
	Luminous flux	Φ	130	-	170	lm
	Dominant wavelength(1)	λ_D	490	-	500	nm
	Peak wavelength(1)	λ_P	-	493	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 5V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W
Green	Forward voltage	V_F	2.3	-	3.0	V
	Luminous flux	Φ	220	-	280	lm
	Dominant wavelength(1)	λ_D	520	-	535	nm
	Peak wavelength(1)	λ_P	-	520	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 5V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W
PC-lime	Forward voltage	V_F	2.8	-	3.4	V
	Luminous flux	Φ	365	-	405	lm
	Dominant wavelength(1)	λ_D	-	550	-	nm
	Peak wavelength(1)	λ_P	-	512	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 5V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W
PC-amber	Forward voltage	V_F	2.8	-	3.4	V
	Luminous flux	Φ	165	-	185	lm
	Dominant wavelength(1)	λ_D	-	598	-	nm
	Peak wavelength(1)	λ_P	-	605	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 5V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W
Red	Forward voltage	V_F	1.8	-	2.8	V
	Luminous flux	Φ	75	-	105	lm
	Dominant wavelength(1)	λ_D	617	-	624	nm
	Peak wavelength(1)	λ_P	-	630	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	20 (V_r = 10V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W

Characteristics

Electrical-optical characteristics (T_A = 25°C, 700mA, single color, continued)

COLOR	PARAMETER	SYMBOL	VALUE			UNIT
			MIN.	TYP.	MAX.	
PC-red	**Forward voltage**	V_F	2.8	-	3.4	V
	Luminous flux	Φ	40	-	48	lm
	Dominant wavelength(1)	λ_D	-	618	-	nm
	Peak wavelength(1)	λ_P	-	651	-	nm
	View angle	$2\theta_{1/2}$	-	120	-	Deg
	Reverse current	I_r	-	-	10 (V_r = 5V)	μA
	Thermal resistance(2)	$R_{\theta JS}$	-	0.7	-	°C/W

(1). Yujileds® promises the chromaticity coordinate tolerance of ±0.0015 (CIE 1931 x,y) based on Yuji standard equipment shall prevail.

(2). This data is for reference only.

Characteristics

Absolute maximum ratings (T_A = 25°C, cyan, white light, PC-lime, PC-amber, PC-red, blue, green)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	5000	mW
DC Forward Current (pulsed)(1)	I_{Fp}	1600(2)	mA
DC Forward Current	I_F	1500	mA
Reverse Voltage	V_R	5	V
Junction Temperature	T_j	150	°C
Solder Point Temperature(3)	T_s	105	°C
Operating Temperature	T_{opr}	-40 ~ +85	°C
Storage Temperature	T_{stg}	-30 ~ +85	°C
Soldering Temperature	T_{sol}	260 ± 5	°C
Reflow Cycles Allowed	-	2	-

Absolute maximum ratings (T_A = 25°C, red)

PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P_D	3000	mW
DC Forward Current (pulsed)(1)	I_{Fp}	1600(2)	mA
DC Forward Current	I_F	1500	mA
Reverse Voltage	V_R	10	V
Junction Temperature	T_j	115	°C
Solder Point Temperature(3)	T_s	85	°C
Operating Temperature	T_{opr}	-25 ~ +85	°C
Storage Temperature	T_{stg}	-35 ~ +85	°C
Soldering Temperature	T_{sol}	260 ± 5	°C
Reflow Cycles Allowed	-	2	-

(1). Pulse width ≤ 0.1ms, duty ≤ 1/10.

(2). Theoretical data.

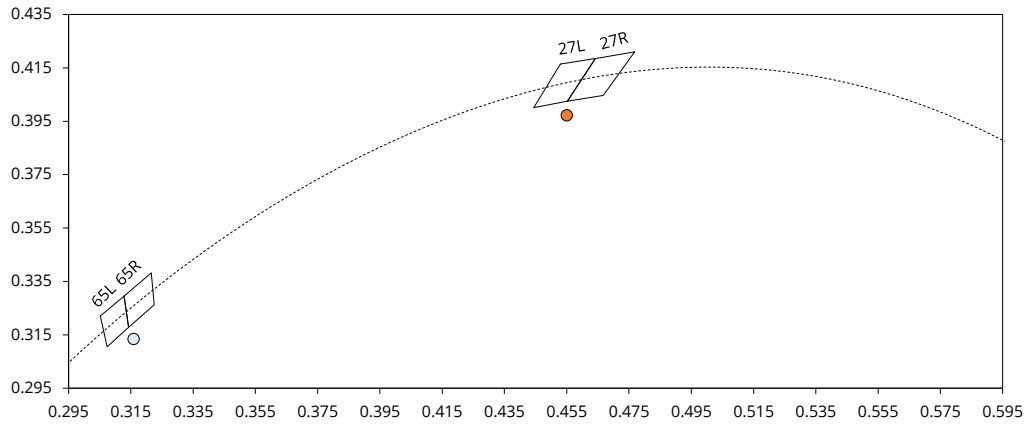
(3). See page **Package material and dimension**.

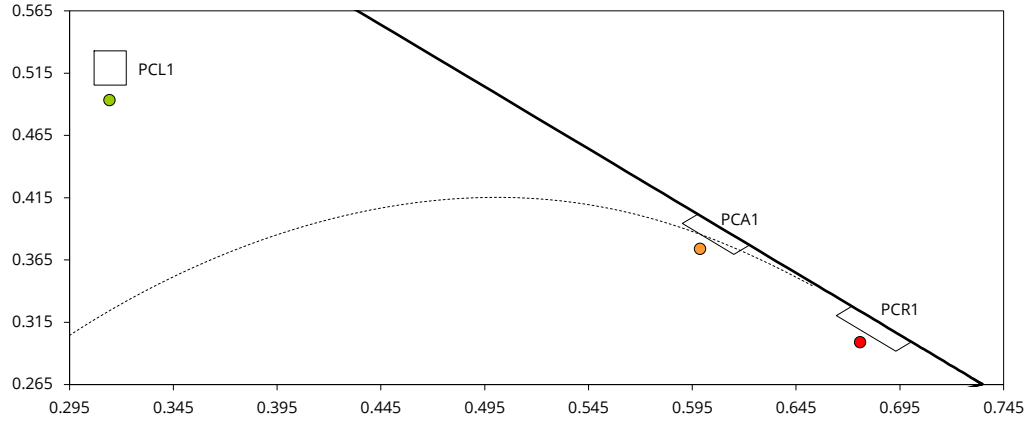
Chromaticity group and diagram

Chromaticity bins & coordinates (T_A = 25°C, 700mA, white light, PC-lime, PC-amber, PC-red)

CCT / COLOR	BIN	CIE 1931 COORDINATES							
		X0	Y0	X1	Y1	X2	Y2	X3	Y3
2700K	27R	0.4642	0.4185	0.4552	0.4025	0.4667	0.4047	0.4768	0.4210
	27L	0.4530	0.4164	0.4444	0.4001	0.4552	0.4025	0.4642	0.4185
6500K	65R	0.3128	0.3295	0.3143	0.3178	0.3225	0.3262	0.3216	0.3382
	65L	0.3052	0.3220	0.3074	0.3105	0.3143	0.3178	0.3128	0.3295
PC-lime	PCL1	0.3068	0.5329	0.3068	0.5054	0.3223	0.5054	0.3223	0.5329
PC-amber	PCA1	0.5977	0.4018	0.5902	0.3943	0.6150	0.3695	0.6225	0.3770
PC-red	PCR1	0.6719	0.3279	0.6644	0.3204	0.6931	0.2918	0.7006	0.2993

CIE 1931 diagram





Chromaticity group and diagram

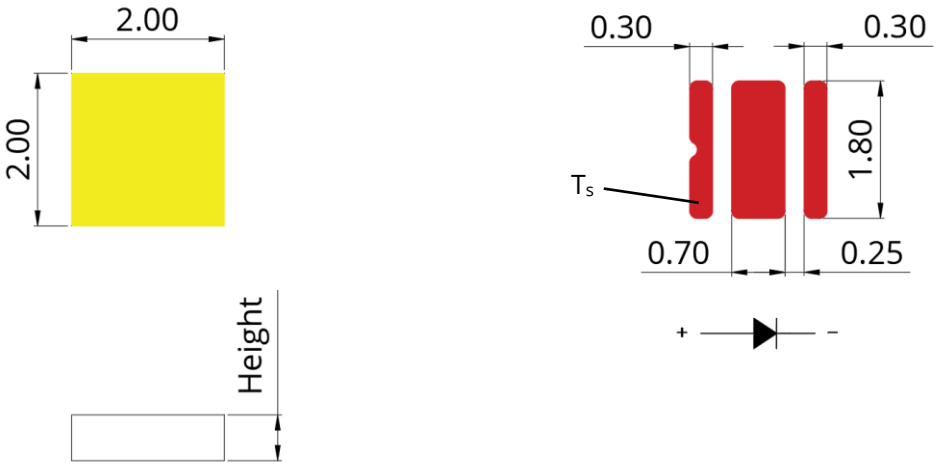
Dominant wavelength bins (T_A = 25°C, 700mA, blue, cyan, green, red)

COLOR	BIN	WAVELENGTH		UNIT
		MIN.	MAX.	
Blue	B1	455	457.5	nm
Cyan	C1	490	495	nm
	C2	495	500	nm
Green	G1	522	527	nm
	G2	527	532	nm
Red	R1	615	618	nm
	R2	618	621	nm

Package material and dimension

Package layout

All dimensions in mm, tolerance unless mentioned is ±0.1mm.



CCT / COLOR	Height (mm)
2700K	0.75
6500K	0.72
Blue	0.87
Cyan	0.88
Green	0.88
PC-lime	0.80
PC-amber	0.91
PC-red	0.88
Red	0.86

Package materials (white light, PC-lime, PC-amber, PC-red)

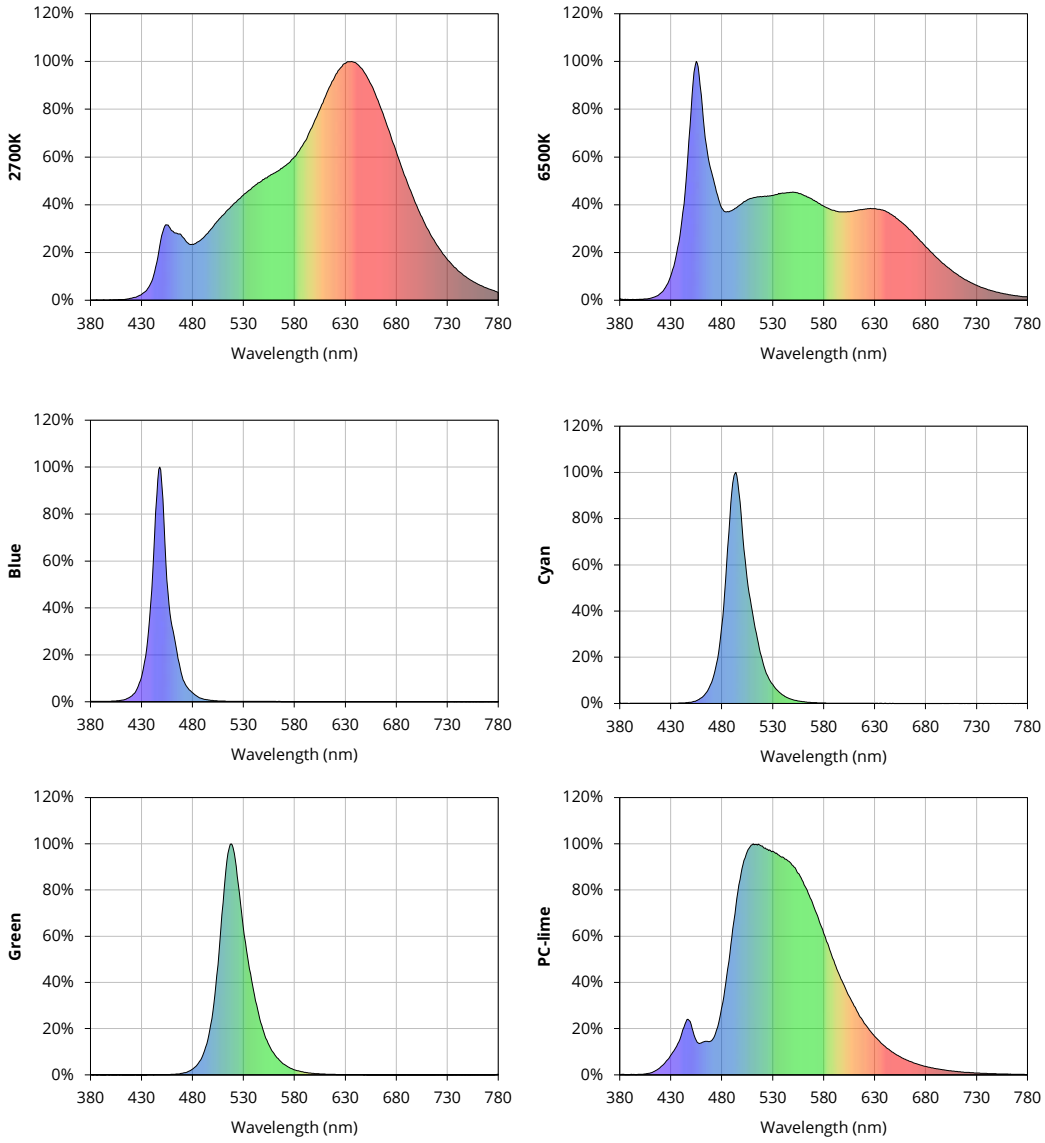
ITEM	DESCRIPTION
Die material	InGaN
Lead frame material	AlN
Encapsulant resin material	Silicon + Phosphor

Package materials (blue, cyan, green, red)

ITEM	BLUE	CYAN	GREEN	RED
Die material	InGaN	InGaN	InGaN	AlGaInP
Lead frame material	AlN			
Encapsulant resin material	Silicon			

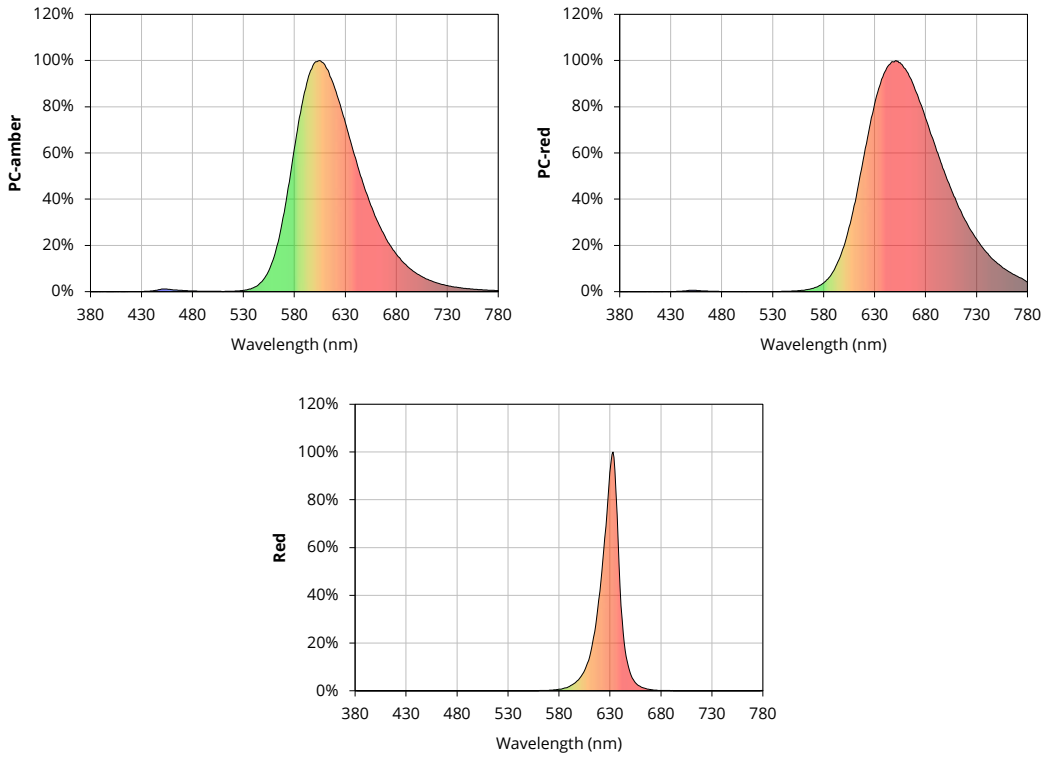
Characteristic graph

Typical spectral power distribution (normalized)



Characteristic graph

Typical spectral power distribution (normalized) (Continued)



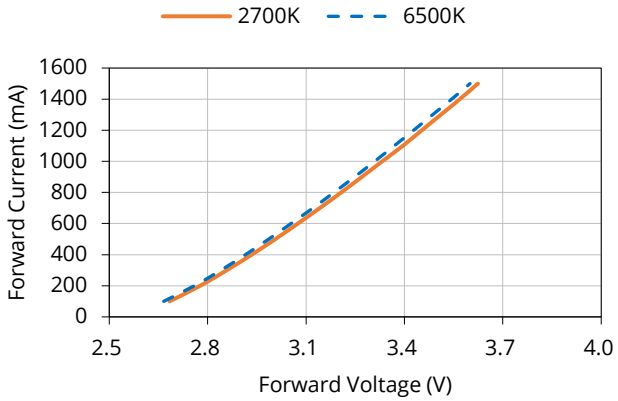
Characteristic graph

Forward current (white light)

All characteristic curves are for reference only and not guaranteed.

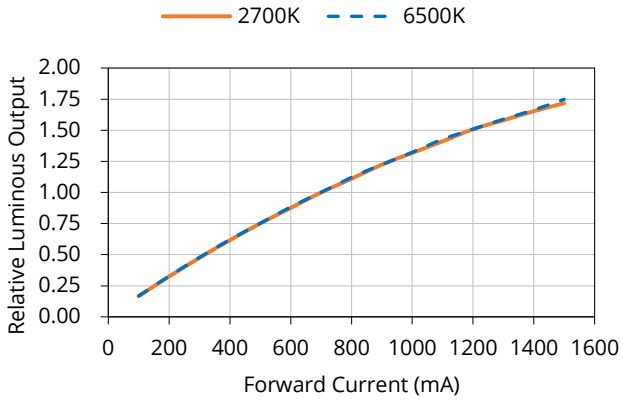
Vs. forward voltage

(T_A = 25°C)



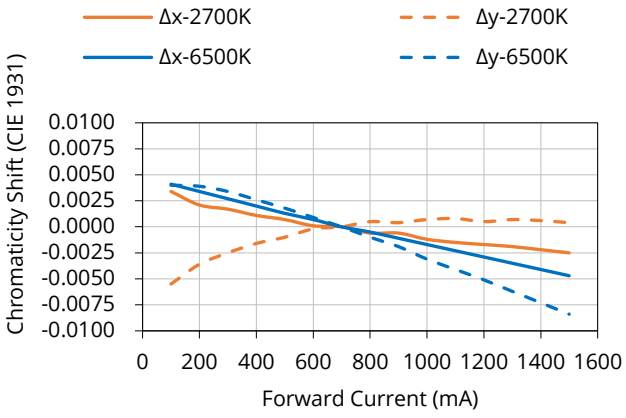
Vs. relative luminous flux

(T_A = 25°C)



Vs. relative chromaticity shift

(T_A = 25°C)



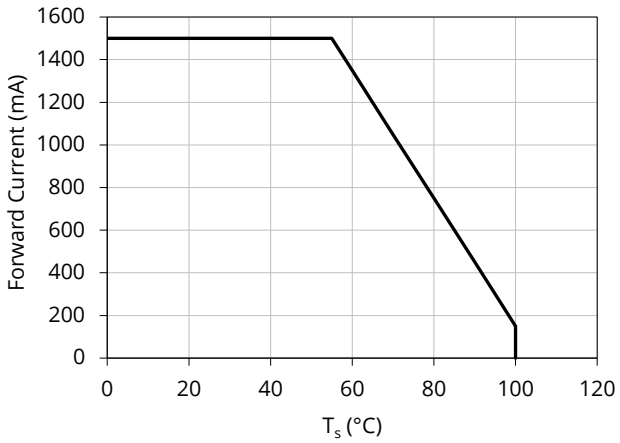
Characteristic graph

Forward current (white light) (continued)

All characteristic curves are for reference only and not guaranteed.

Derating based on solder point

Note: De-rating curves are meant for recommendation only and are not meant to provide guarantees of product stability and longevity.



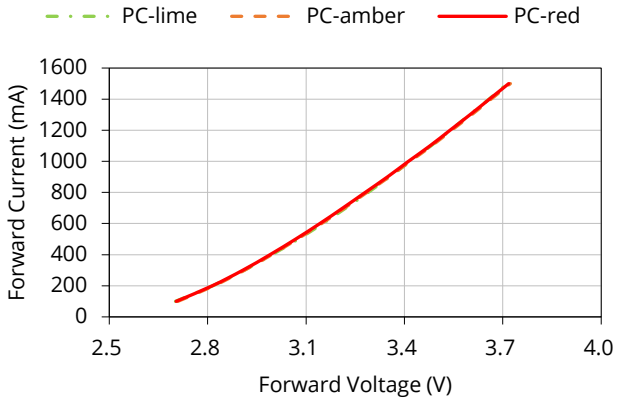
Characteristic graph

Forward current (PC-lime, PC-amber, PC-red)

All characteristic curves are for reference only and not guaranteed.

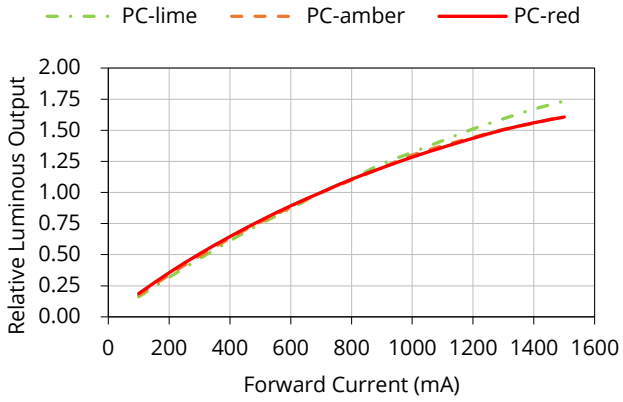
Vs. forward voltage

(T_A = 25°C)



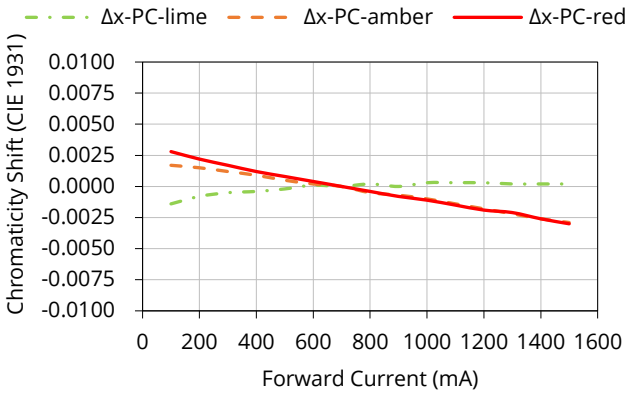
Vs. relative luminous flux

(T_A = 25°C)



Vs. relative chromaticity shift

(T_A = 25°C)



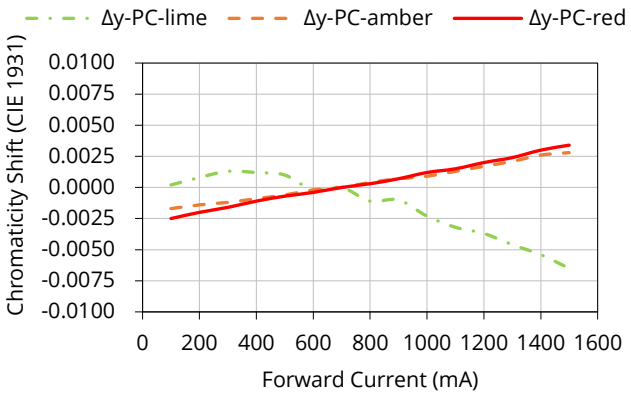
Characteristic graph

Forward current (PC-lime, PC-amber, PC-red) (continued)

All characteristic curves are for reference only and not guaranteed.

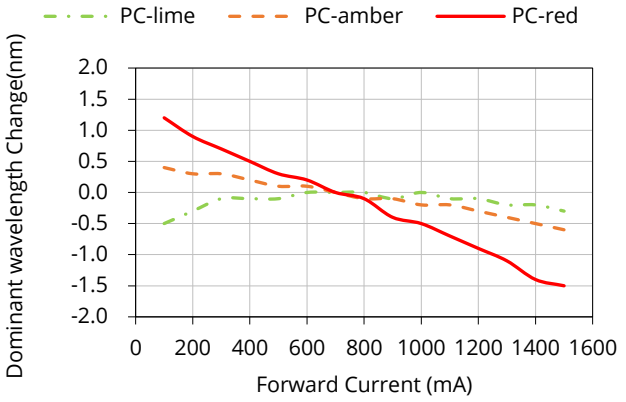
Vs. relative chromaticity shift

(T_A = 25°C)



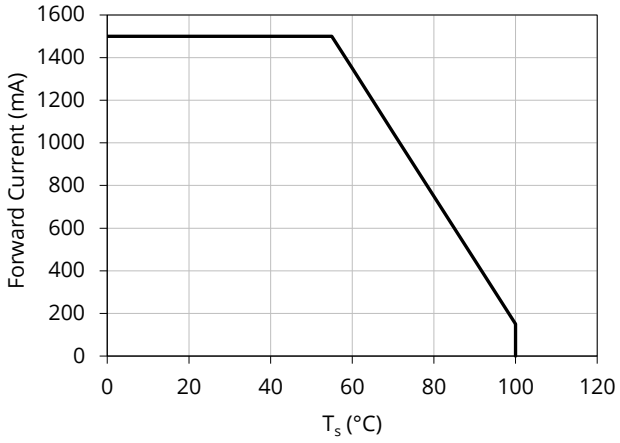
Vs. relative dominant wavelength shift

(T_A = 25°C)



Derating based on solder point

Note: De-rating curves are meant for recommendation only and are not meant to provide guarantees of product stability and longevity.



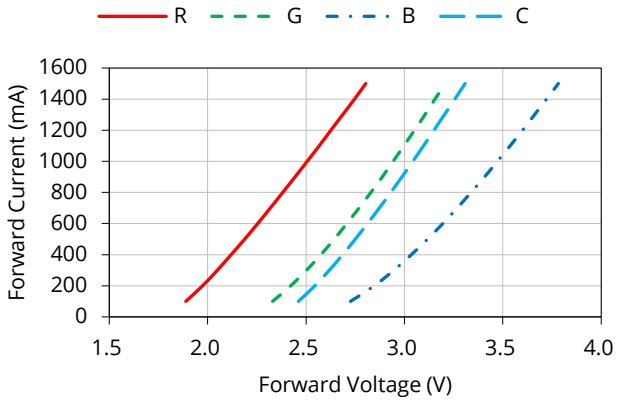
Characteristic graph

Forward current (B = blue, C = cyan, G = green, R = red)

All characteristic curves are for reference only and not guaranteed.

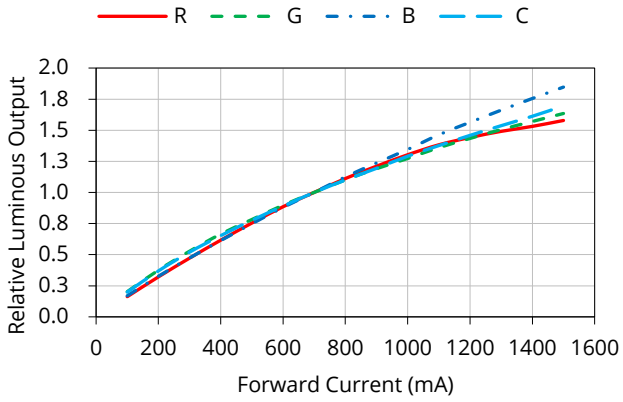
Vs. forward voltage

(T_A = 25°C)



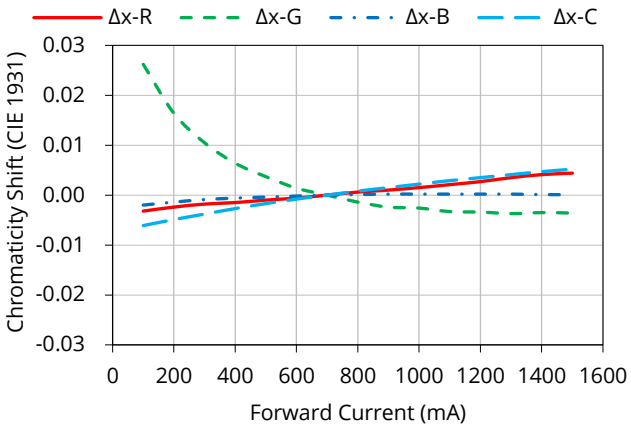
Vs. relative luminous flux

(T_A = 25°C)



Vs. relative chromaticity shift

(T_A = 25°C)



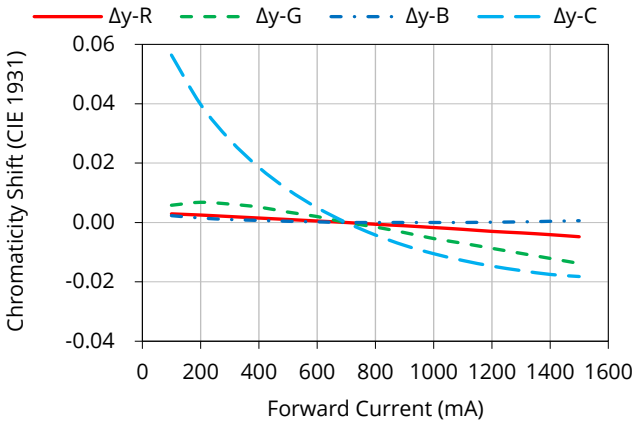
Characteristic graph

Forward current (B = blue, C = cyan, G = green, R = red) (continued)

All characteristic curves are for reference only and not guaranteed.

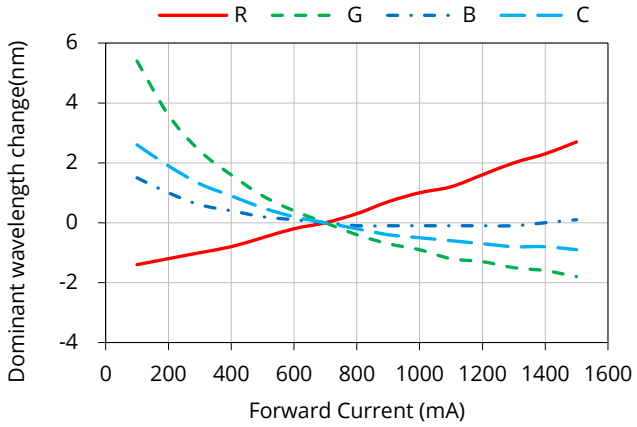
Vs. relative chromaticity shift

(T_A = 25°C)



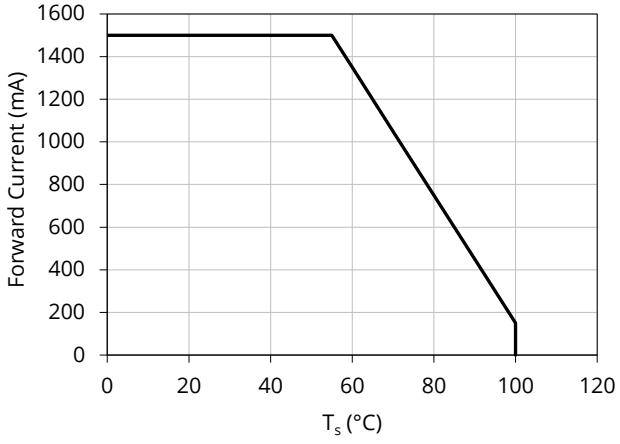
Vs. relative dominant wavelength shift

(T_A = 25°C)



Derating based on solder point

Note: De-rating curves are meant for recommendation only and are not meant to provide guarantees of product stability and longevity.



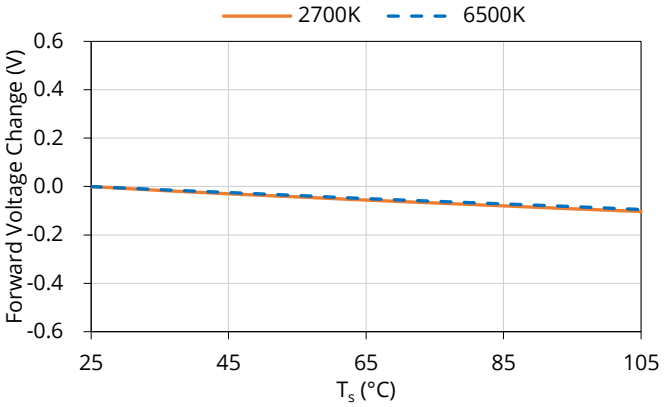
Characteristic graph

Solder point temperature (T_s) (white light)

All characteristic curves are for reference only and not guaranteed.

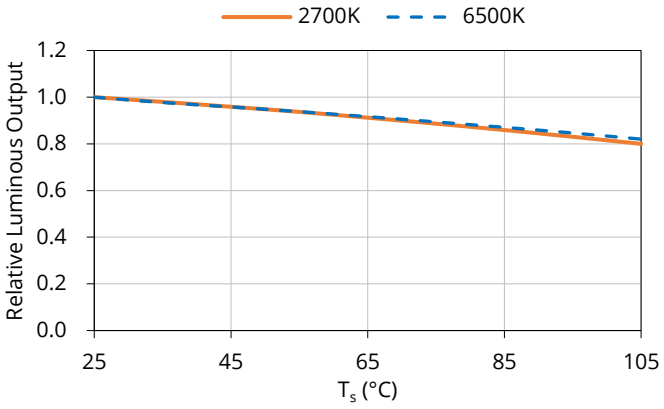
Vs. forward voltage

(I_F = 700mA)



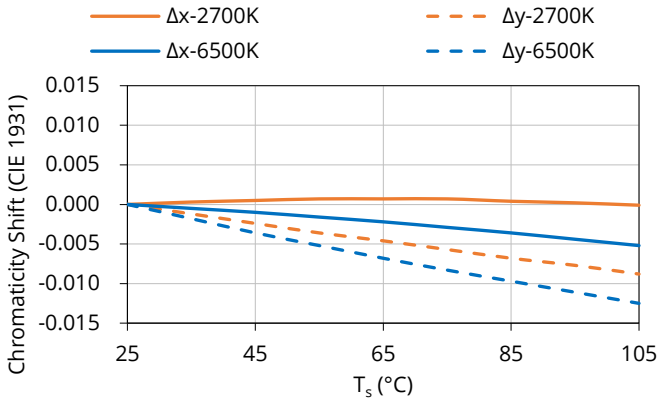
Vs. relative luminous flux

(I_F = 700mA)



Vs. relative chromaticity shift

(I_F = 700mA)



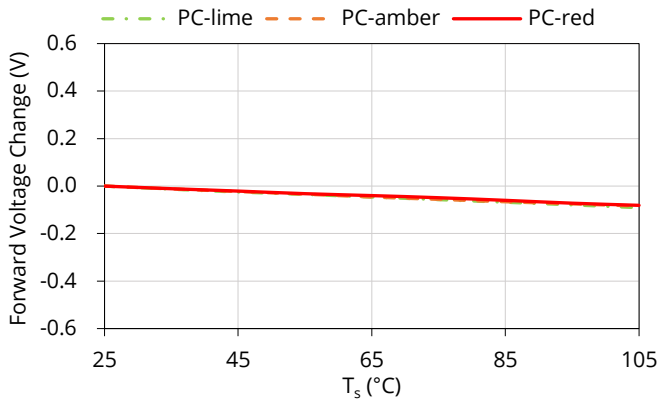
Characteristic graph

Solder point temperature (T_s) (PC-lime, PC-amber, PC-red)

All characteristic curves are for reference only and not guaranteed.

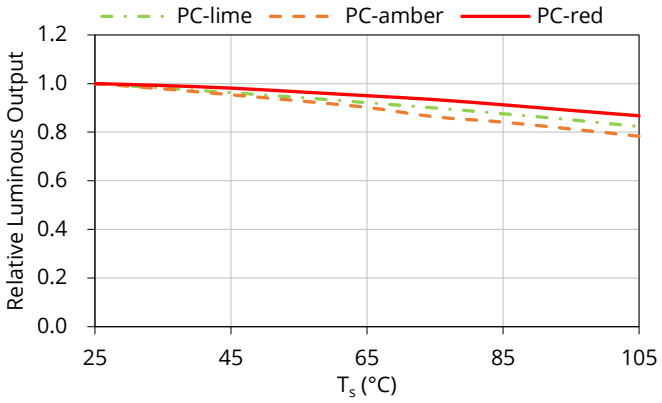
Vs. forward voltage

(I_F = 700mA)



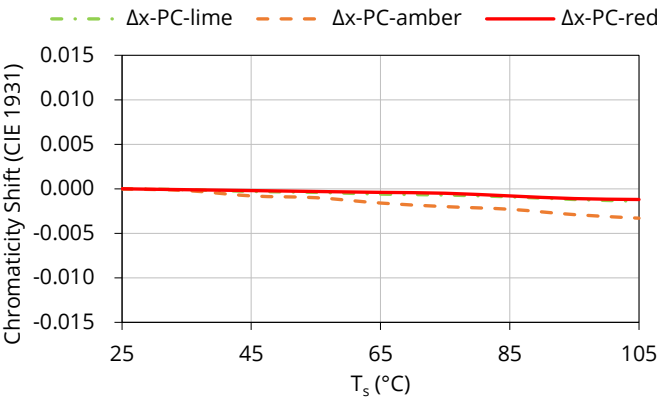
Vs. relative luminous flux

(I_F = 700mA)



Vs. relative chromaticity shift

(I_F = 700mA)



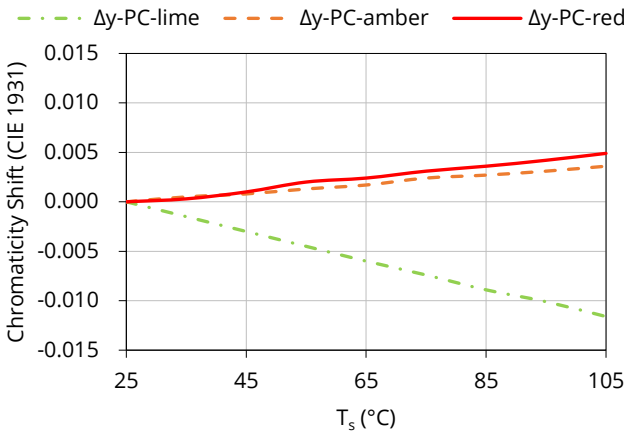
Characteristic graph

Solder point temperature (T_s) (PC-lime, PC-amber, PC-red) (continued)

All characteristic curves are for reference only and not guaranteed.

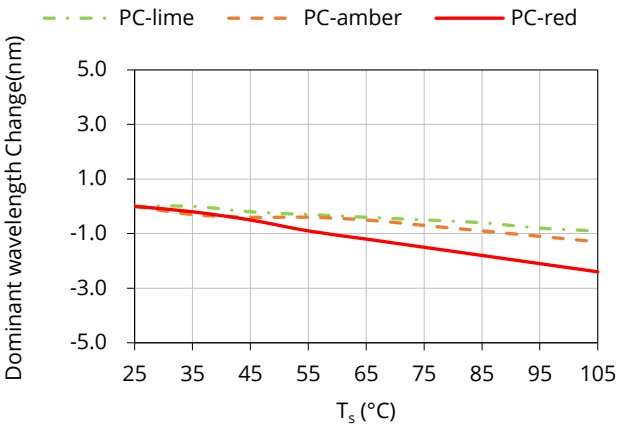
Vs. relative chromaticity shift

(I_F = 700mA)



Vs. relative dominant wavelength shift

(I_F = 700mA)



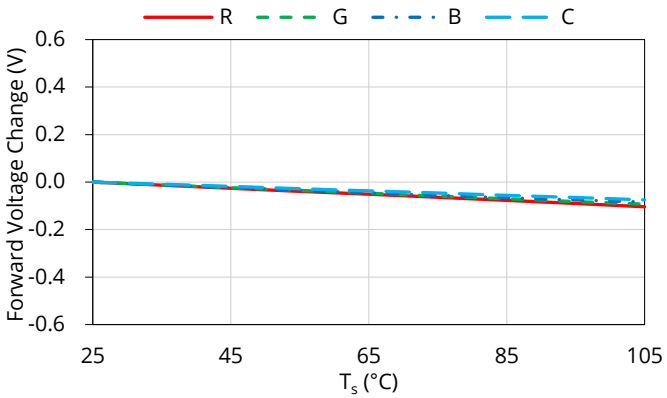
Characteristic graph

Solder point temperature (T_s) (B = blue, C = cyan, G = green, R = red)

All characteristic curves are for reference only and not guaranteed.

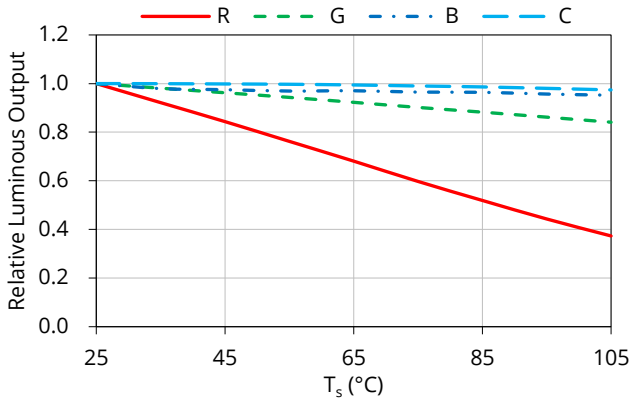
Vs. forward voltage

(I_F = 700mA)



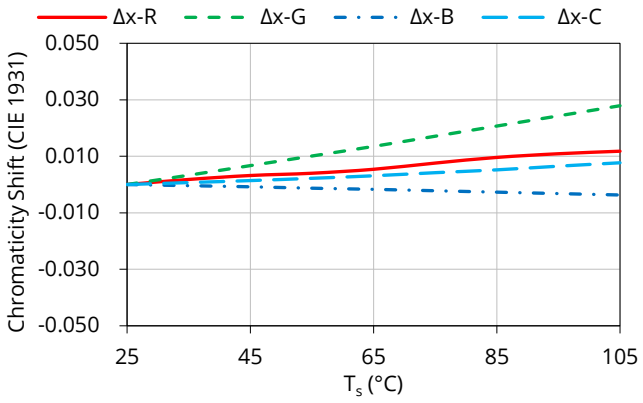
Vs. relative luminous flux

(I_F = 700mA)



Vs. relative chromaticity shift

(I_F = 700mA)



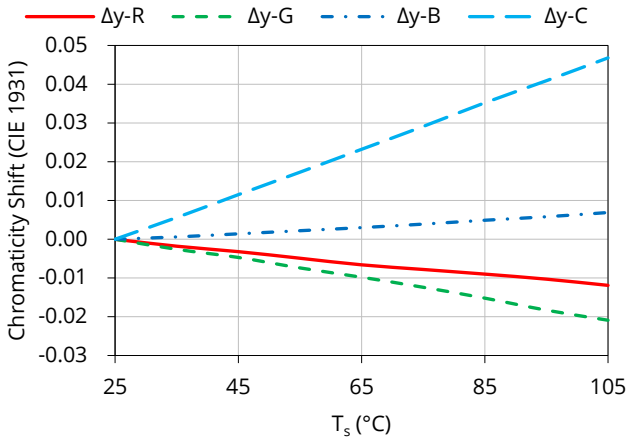
Characteristic graph

Solder point temperature (T_s) (B = blue, C = cyan, G = green, R = red) (continued)

All characteristic curves are for reference only and not guaranteed.

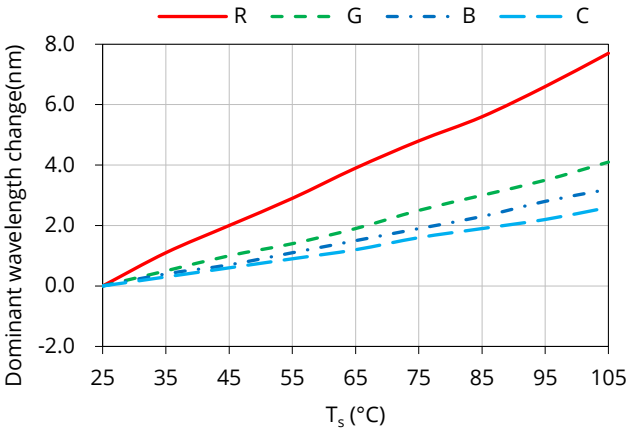
Vs. relative chromaticity shift

(I_F = 700mA)



Vs. relative dominant wavelength shift

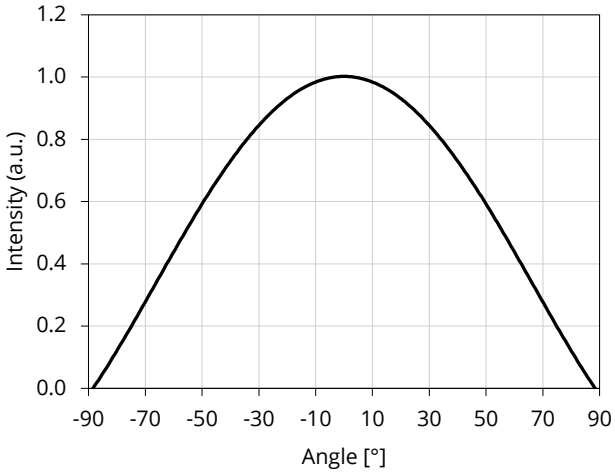
(I_F = 700mA)



Characteristic graph

Spatial distribution (T_A = 25°C, I_F = 700mA)

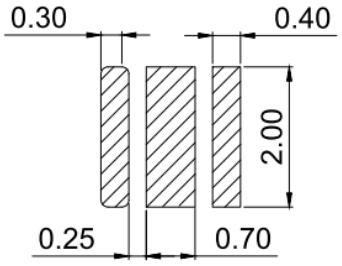
All characteristic curves are for reference only and not guaranteed.



Solder and reflow profile

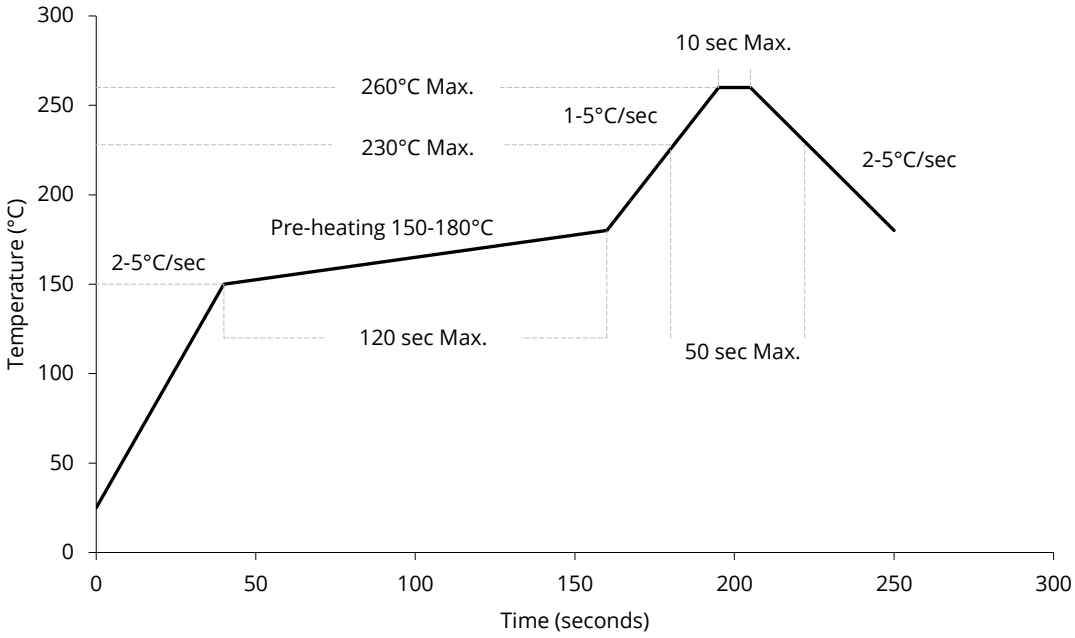
Recommended solder pad layout

All dimensions in mm, tolerance unless mentioned is ±0.1mm.



Reflow profile

Soldering ramp-up time (Pb-FREE).



Note: Soldering paste with the melting point at 230°C is recommended.

SMT instruction

Problems caused by improper selection of collet

Choosing the right collet is important in ensuring product quality after SMT. LEDs are different from other electronic components, as they are not only concerned with electrical output but also optical output. This characteristic makes LEDs more fragile in the process of SMT. If the collet's lowering height is not well set, it will bring damage to the gold wire at the time of collet's pick-and-place process which can cause the LED to not illuminate, flicker or contribute to other quality problems, some of which may not be immediately detectable.

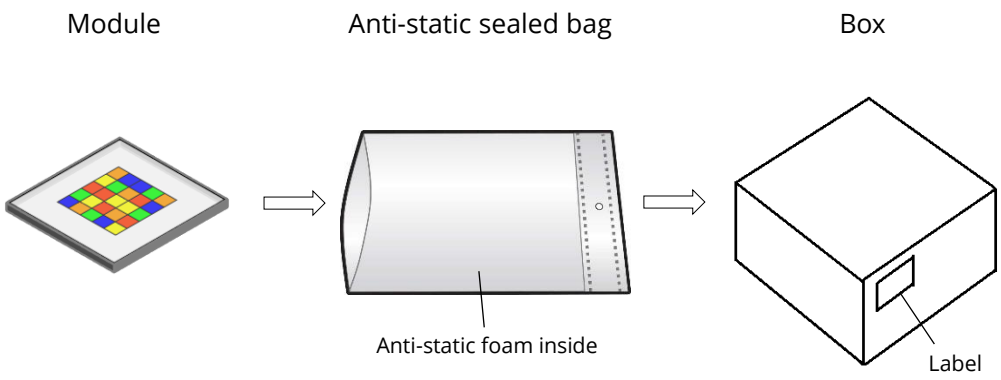
Collet selection

During SMT, please choose the appropriate collet in order to avoid damage the gold wire inside the LED or insufficient suction. Setting the height of the collet is crucial in order to avoid damage to the top view SMD. If the collet setting is set to too low of an altitude, the collet will press down on the SMD, causing damage or breakage to the encapsulant and cause distortion or breakage of the gold wire.

Other notes of caution

- No pressure should be exerted to the epoxy shell of the SMD under high temperature.
- Do not scratch or wipe the lens since the lens and gold wire inside are rather fragile and cross out easy to break.
- LED should be used as soon as possible when being taken out of the original package, and should be stored in anti-moisture and anti-ESD package.
- This usage and handling instructions are for reference only.

Packaging



The size of box depends on the PCB size and production quantity.

About Yujileds

Our story - Start from superior stable red LED phosphor.

We started to make LED phosphor materials in 2006. White LEDs were still in very early stage, the industry focused on improving device brightness and efficiency via yellow phosphor very much. No one cared about the light quality. Based on this situation, we took a different approach and focused on red phosphor technology, which is the most important phosphor recipe for high CRI and/or low CCT LEDs, and it made Yuji become a JV partner with Mitsubishi Chemical from 2012.

Today, we are well known for our comprehensive research and full line-up production of LED phosphor from ultra-violet to near-infrared, and we are proud to commit to providing superior stable and efficient phosphors to the worldwide markets.

Our technology - Focus on LED spectrum innovation.

The industrial structure on both phosphor and LED gives us a unique view to develop our spectrum recipes. Compared to the general LED manufacturers, we have comprehensive information in evaluating the feasibility for both technical and commercial aspects. LED spectrum technology is not only about the quality of white LEDs, but also for different applications which have specialized requirements in lighting.

Yuji is one of the few companies that provide the service of designing or customizing a specific spectrum for clients, our confidence comes from the years of accumulation in focusing on the spectrum technologies and the control of LED phosphor and LED die supply-chain with thousands of successful cases in the past years. Innovating LED technologies and giving them commercial values are our eternal driving force.

Our product - Yujileds®, stands for high-performance LED.

The trademark of Yujileds® is the identification of the LED products developed and manufactured by Yuji. We put our understanding of the LED technologies and the standard of our quality control into every LED we make. Regardless of any product series, we pay attention to expressing the high-performance feature and achieving the product value for clients and never compromise in pursuing the true performance.

Furthermore, we also care about every detail of any documentation we prepare for the product because we

understand the importance to transmit accurate information to clients. It is even more critical for clients to obtain the truth to decide the solution, rather than just a nominal high-performance.

Our client - Outstanding game players in different fields.

Clients are our proudest achievements, now over 200 of our clients are the best game players in their fields in more than 33 countries. We regard the clients' successes as our biggest accomplishments and appreciate their contribution in different fields, clients use our LEDs not just for simple lighting, but to design the lighting for plants, cameras, sensors, health, circadian rhythm, aminals, and other industries that we have never imagined that our technologies can be utilized, that makes our work so meaningful.

Our service - Professional supporting team.

There is a group of people in Yuji passionate about creating maximum value for our clients. We have accumulated experience in different projects. Currently, the company gathers more than 30 experts from various fields of semiconductor, chemistry, optics, photoelectricity, circuitry, materials and color science.

Our sales team is well trained in deep LED technologies and has skilled global communication experience. Not just for sales, our team is more like a specialized consultancy to help every client succeed in different projects, and we do not only provide professional business service, but also support in the supply chain, logistics, marketing and technical discussions.

Contact us - We look forward to providing our efficient service for you.

LED website: www.yujiintl.com
Find Yujileds® high-performance LEDs, read our insights into a variety of advanced technologies and applications.
Contact: info@yujigroup.com

LED lighting website: www.yujilighting.com
Find the state-of-art LED lamps and luminaires designed for improving the lighting experience with our vision of illuminating the future.
Contact: lighting@yujigroup.com

Online shop: store.yujiintl.com
Shop your favorite Yuji Lighting product with rapid and professional service.
Contact: webstore@yujigroup.com