

QT-Brightek High Power Series

0.2W Mid Power 2835 LED

Part No.: QBHP686-IWK-SWXX

XX = SW22: White (CCT 2200K)

XX = SW25: White (CCT 2500K)

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Introduction

Feature:

- Yellow diffused lens
- Package in tape and reel
- 0.2W mid power
- Super high flux and luminance
- White color (CCT 2200K or CCT 2500K)
- CRI 80 typ.

Description:

The low profile 0.2W high bright LED has height of 0.8mm. It is ideal for indoor lighting and general used.

Application:

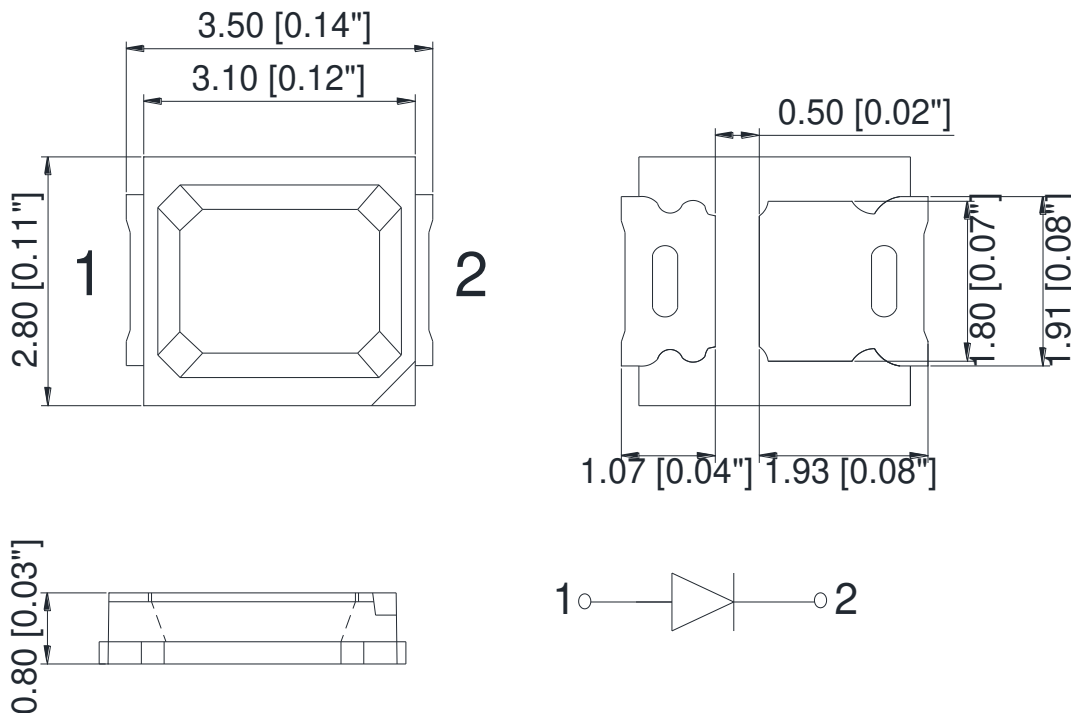
- Architectural lighting
- Household appliances
- General Lighting

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		CIE Coordinate & CCT	Φ _v (lm)	
			Typ.	Max.		Typ.	Min.
QBHP686-IWK-SW22	White	60	3.0	3.6	X=0.5018 Y=0.4153 CCT: 2200K	17	19
QBHP686-IWK-SW25	White	60	3.0	3.6	X=0.4806 Y=0.4141 CCT: 2500K	18	20

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
InGaN	216	60	125	5	-40 to +85	-40 to +100	260

*Duty 1/8 @ 1kHz

**IR Reflow for no more than 10 sec @ 260 °C

Forward Voltage V_F @ I_F=60mA

Bin	Min.	Max.	Unit
2	2.8	3.0	V
3	3.0	3.2	
4	3.2	3.4	
5	3.4	3.6	

Luminous Flux Φ_v for SW22 @ I_F=60mA

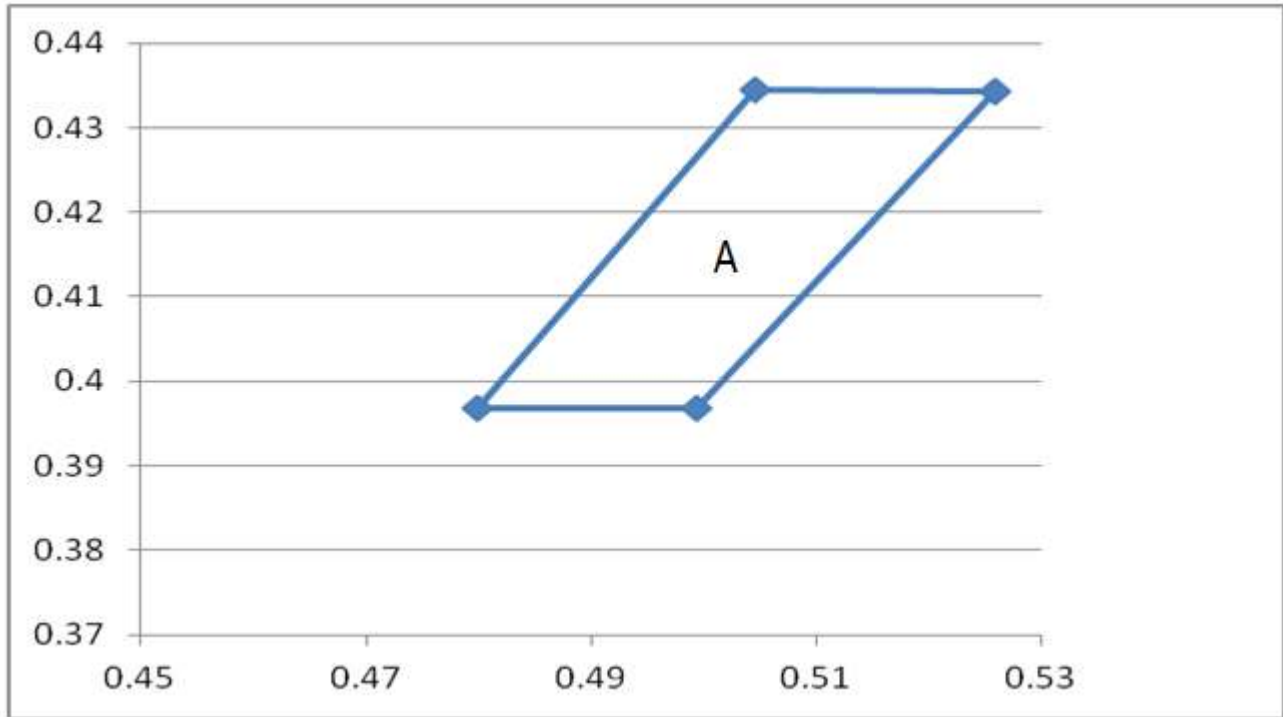
Bin	Min.	Max.	Unit
1	17	19	lm
2	19	21	

Luminous Flux Φ_v for SW25 @ I_F=60mA

Bin	Min.	Max.	Unit
A	18	20	lm
B	20	22	

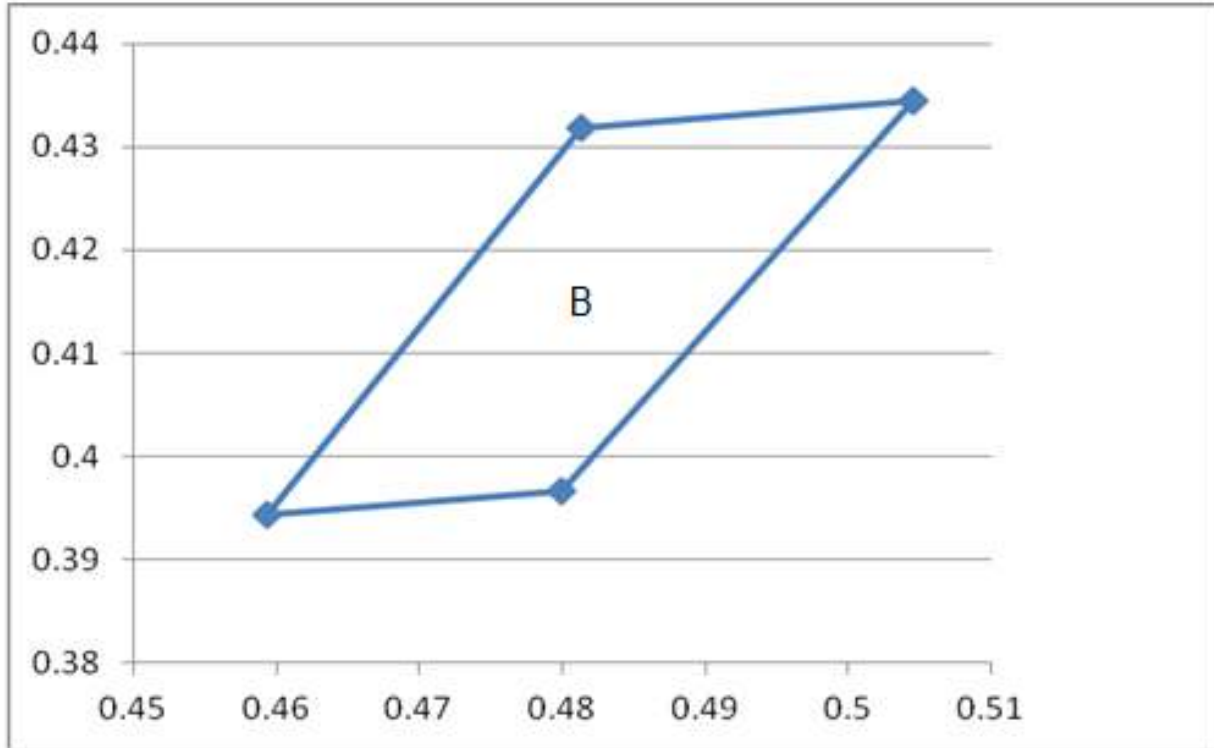
Correlated Color Temperature Chart

QBHP686-IWK-SW22



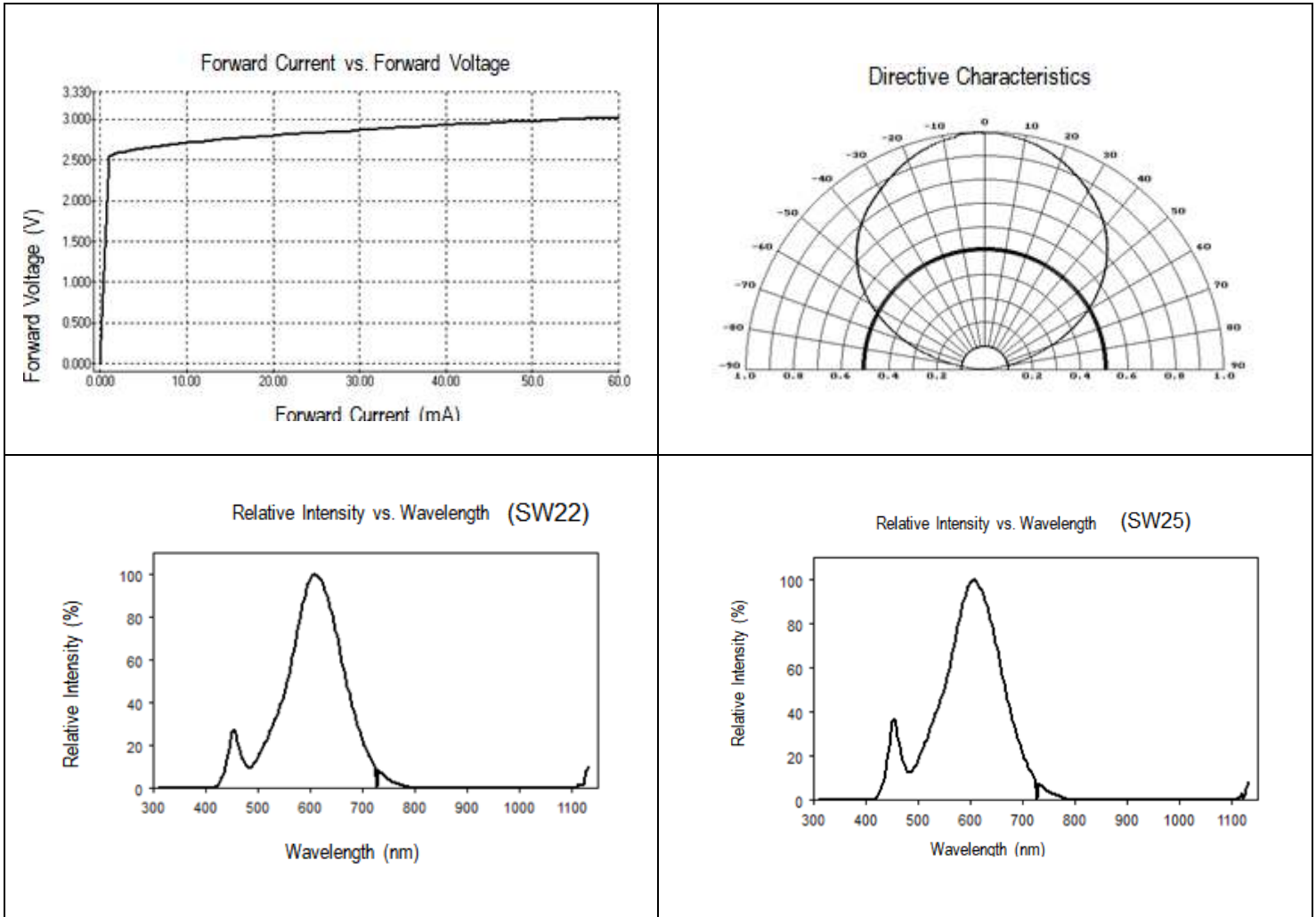
Rank	Chromaticity coordinates				
A	X	0.5259	0.5045	0.4799	0.4993
	Y	0.4342	0.4344	0.3967	0.3967

QBHP686-IWK-SW25



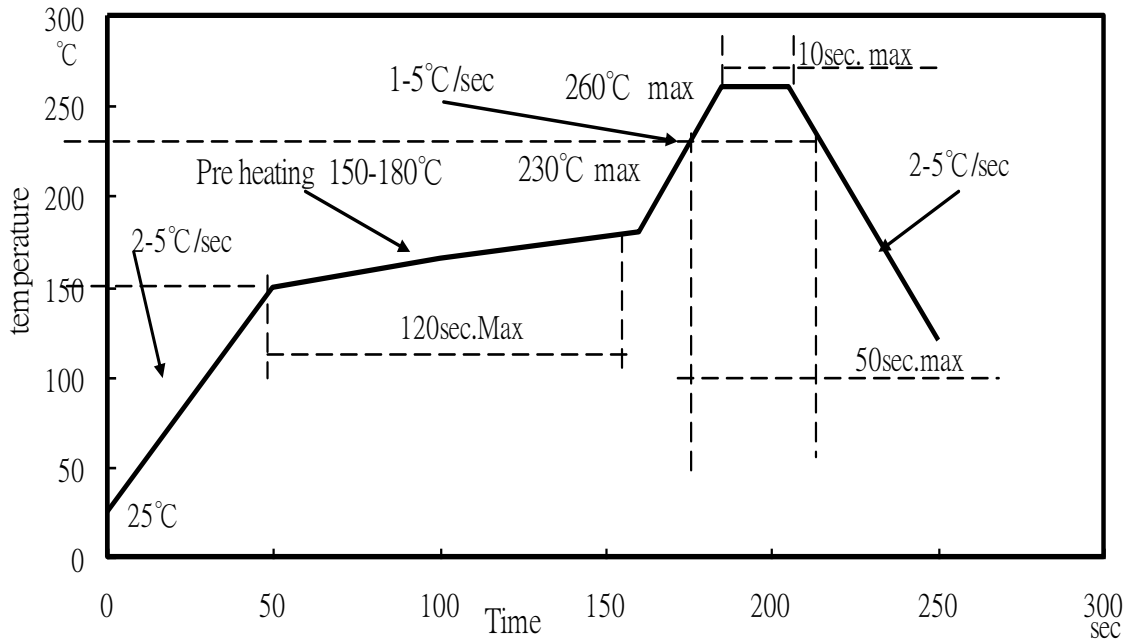
Rank	Chromaticity coordinates				
B	X	0.5045	0.4813	0.4593	0.4799
	Y	0.4344	0.4319	0.3944	0.3967

Characteristic Curves

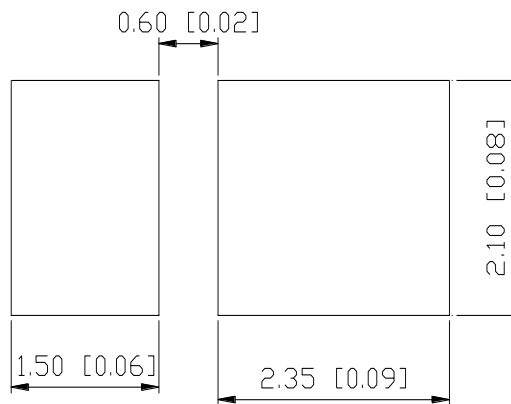


Solder Profile

Lead-Free soldering Profile



Recommended Pad Layout

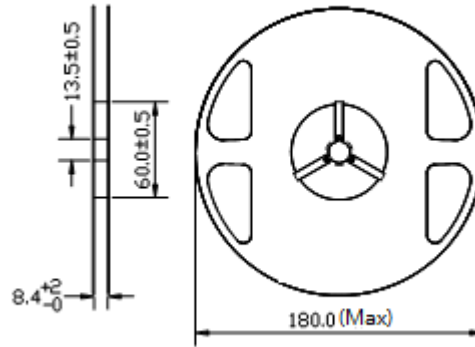


Units: mm

Tolerance: ± 0.2mm

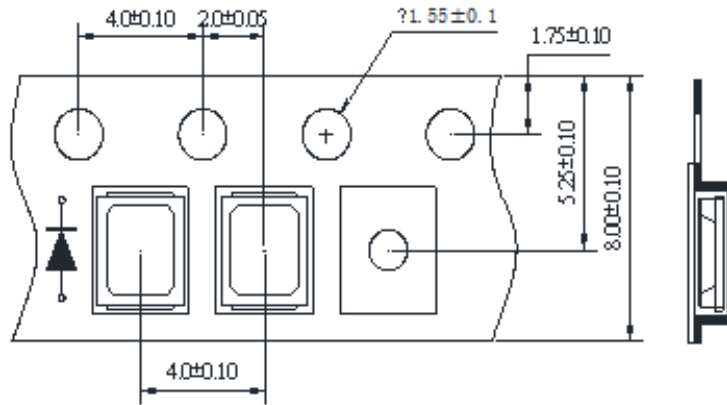
Packing

Reel Dimension:



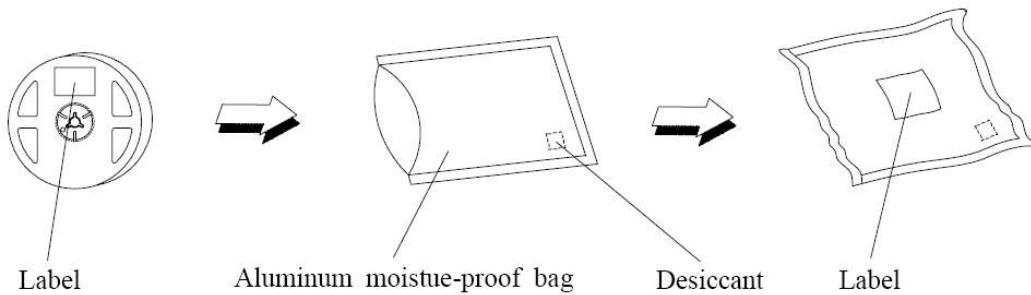
Unit: mm

Tape Dimension:



Unit: mm

Packaging Specifications:



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Labeling



Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

WI: _____

Date: _____

Made in China

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBHP686-IWK-SW22	QBHP686-IWK-SW22	Iv=19lm typ. @ If=60mA / CCT=2200K typ.	2,000 units
QBHP686-IWK-SW25	QBHP686-IWK-SW25	Iv=20lm typ. @ If=60mA / CCT=2500K typ.	2,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBHP686-IWK-SWXX	V1.0	05/10/2021
Update color description	V1.1	11/19/2021

Disclaimer

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Life Support Policy

QT-BRIGHTTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTTEK. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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