Feature:

- Clear lens
- Package in tape and reel
- 3W high power
- InGaN technology for IB/IG
- AlInGaP technology for R

Description:

These 3W high power LEDs have a height profile of 5.0mm. With super high flux and high luminance, these LEDs are ideal for lighting.

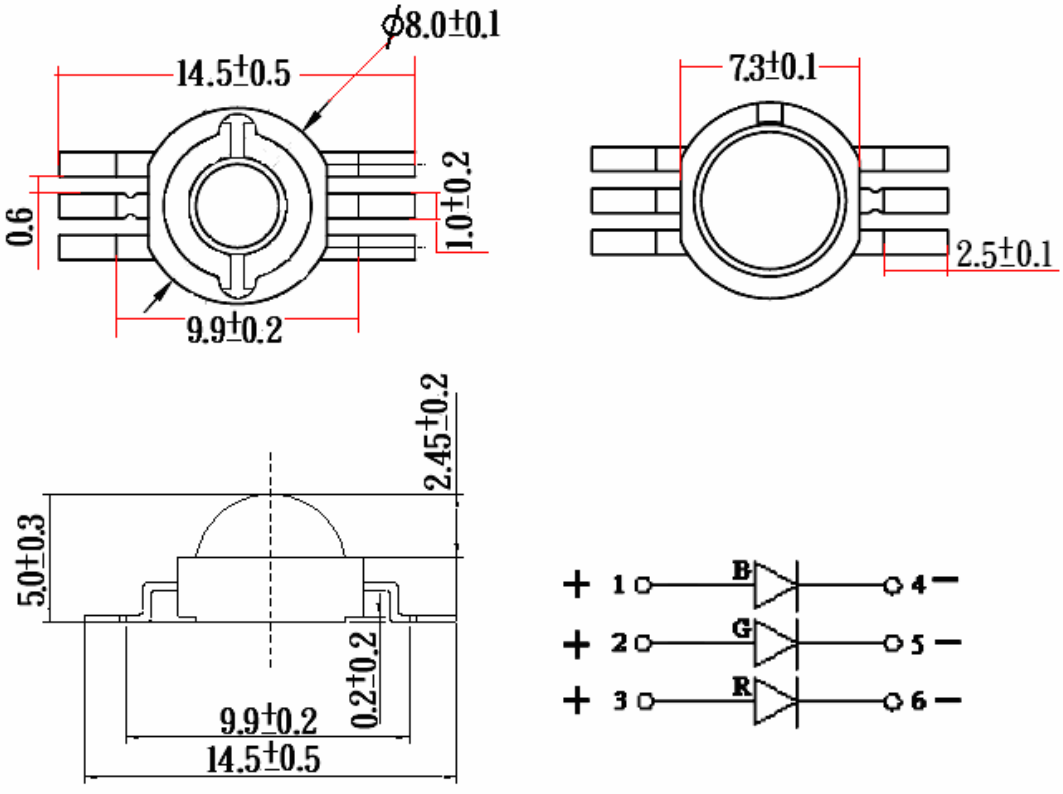
Application:

- Architectural lighting
- Projector light source
- Traffic signal
- Pathway lighting
- Household appliance

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant

Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (T_A=25 °C)

Product	Color	I_F(mA)	V_F(V)		λ(nm)			Φ^*_V(lm)	
			Typ.	max	λ_D	λ_P	Δλ	min	typ.
QBHP682-RGBU	Blue (IB)	350	3.5	4.0	465	468	25	-	12
	Green (IG)		3.5	4.0	525	518	35	-	60
	Red (R)		2.4	3.0	627	632	20	-	27

Luminous Intensity Tolerance is ±10%

Absolute Maximum Rating

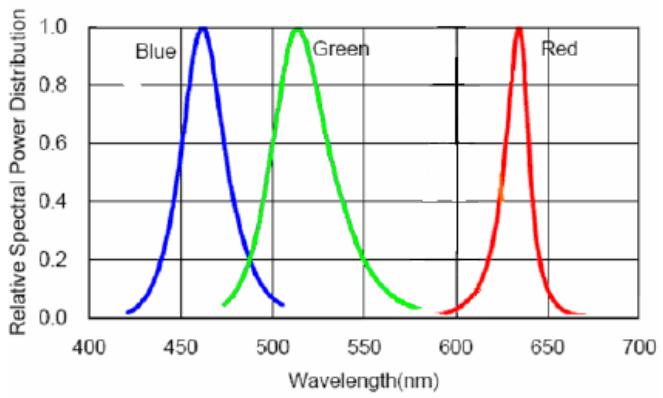
Part #	P_d (mW)	I_F (mA)	I_{FP} (mA)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{SOL} (°C)**
InGaN (IB/IG)	1295	350	500	5	-30 to +85	-40 to +100	240
AlInGaP (R)	1295	350	500	5	-30 to +85	-40 to +100	

*Duty 1/10 @ 1KHz

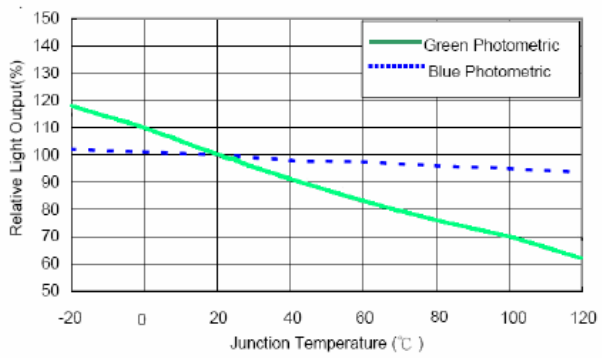
** IR Reflow for no more than 10 sec @ 240 °C

Characteristic Curves:

Wavelength Characteristics, Tj=25℃

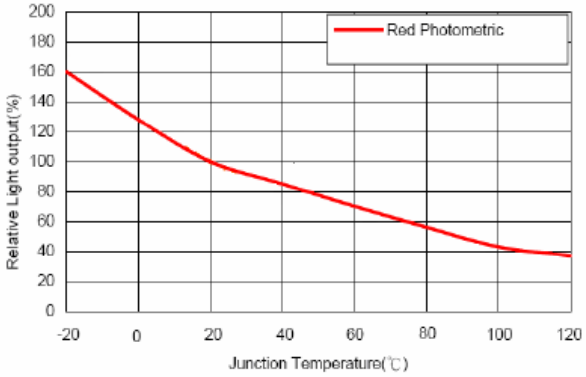


Light Output Characteristics



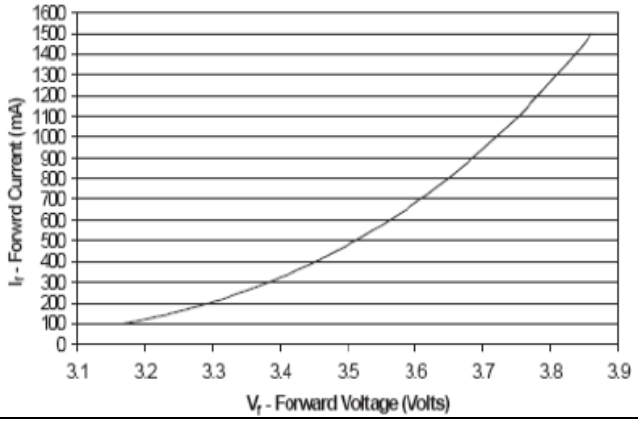
Relative Light VS.Junction Temperature

Light Output Characteristics

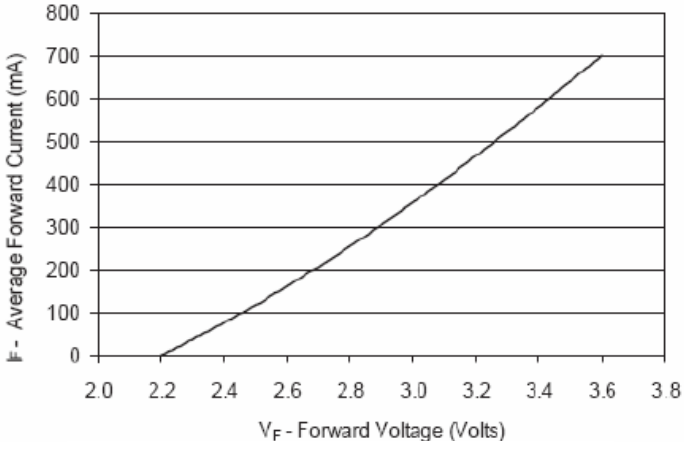


Relative Light Output VS. Junction Temperature

Forward Current Characteristics, Tj=25℃

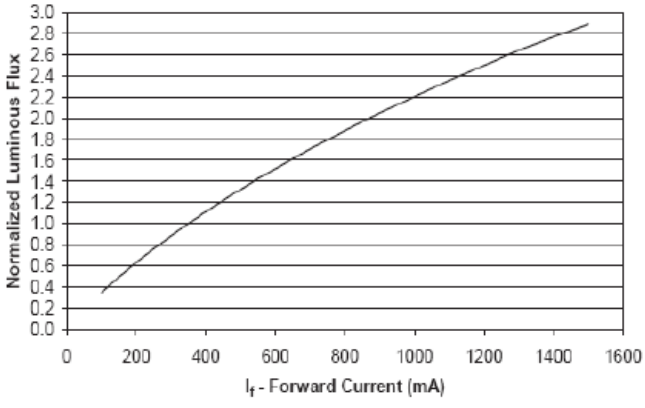


Forward Current Characteristics, Tj=25℃



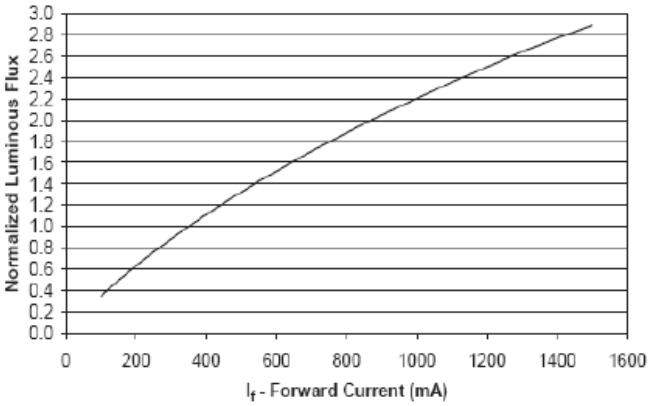
Forward Current VS.Forward Voltage for Red

Relative Luminous Flux



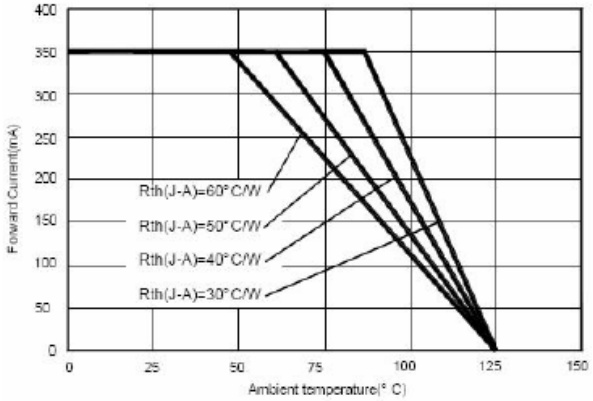
Relative Luminous Flux VS. Forward Current for Blue and Green at Tj=25℃ Test Current 350mA

Relative Luminous Flux



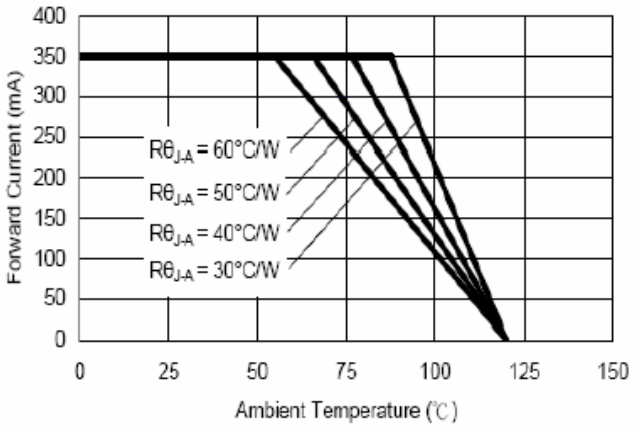
Relative Luminous Flux VS. Forward Current for Red at Tj=25℃ Test Current 350mA

Current Derating Curves



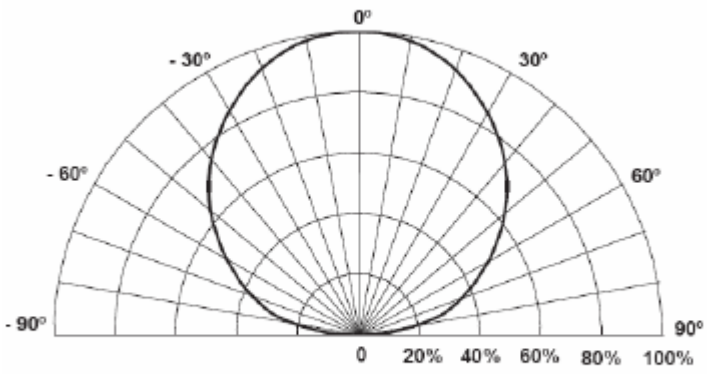
Maximum Forward Current VS. Ambient Temperature bassed on Tjmax=125℃ for Blue and Green

Current Derating Curves



Maximum Forward Current VS. Ambient Temperature bassed on Tjmax=120℃ for Red

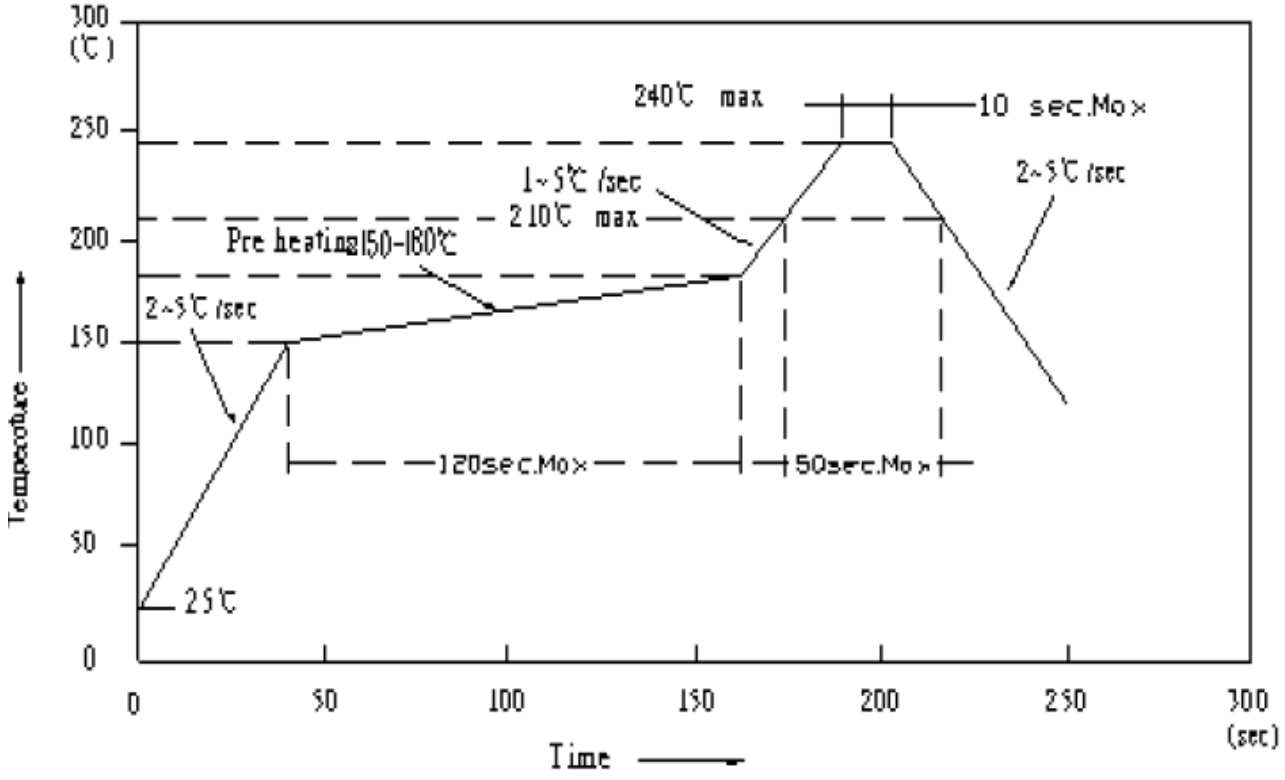
Typical Radiation Patterns



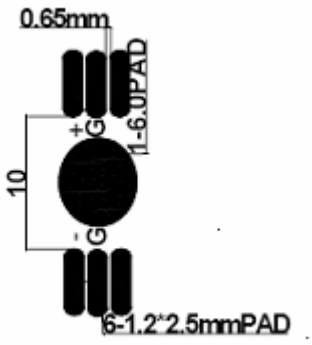
Typical Polar Radiation Pattern

Solder Profile:

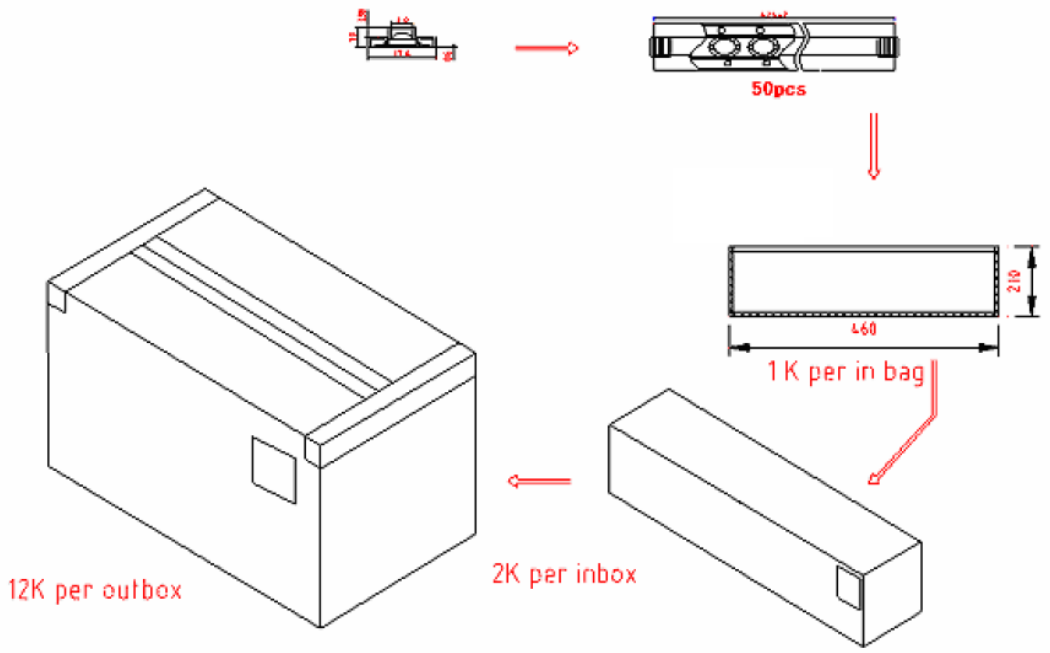
-Recommended tin glue specifications: melting temperature in the range of 178~192 ^{O}C
-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



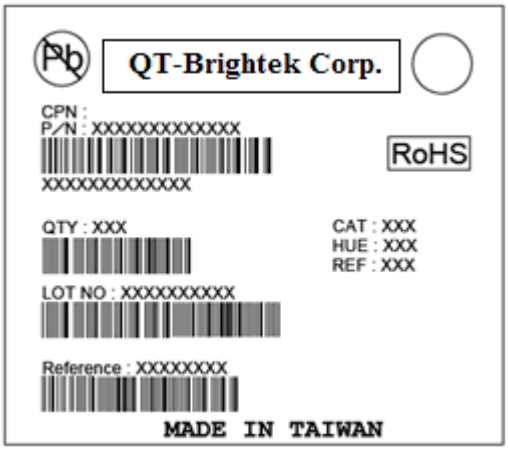
Soldering Footprint:



Packing:



Labeling:



Ordering Information:

Part #	Orderable Part #	Spec Range	Quantity per tube
QBHP682-RGBU	QBHP682-RGBU	--	50 units

Revision History:

Description:	Revision #	Revision Date
New Release of QBHP682-RGBU	V1.0	9/28/2010
Information Updates	V1.1	1/14/2011

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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.