



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



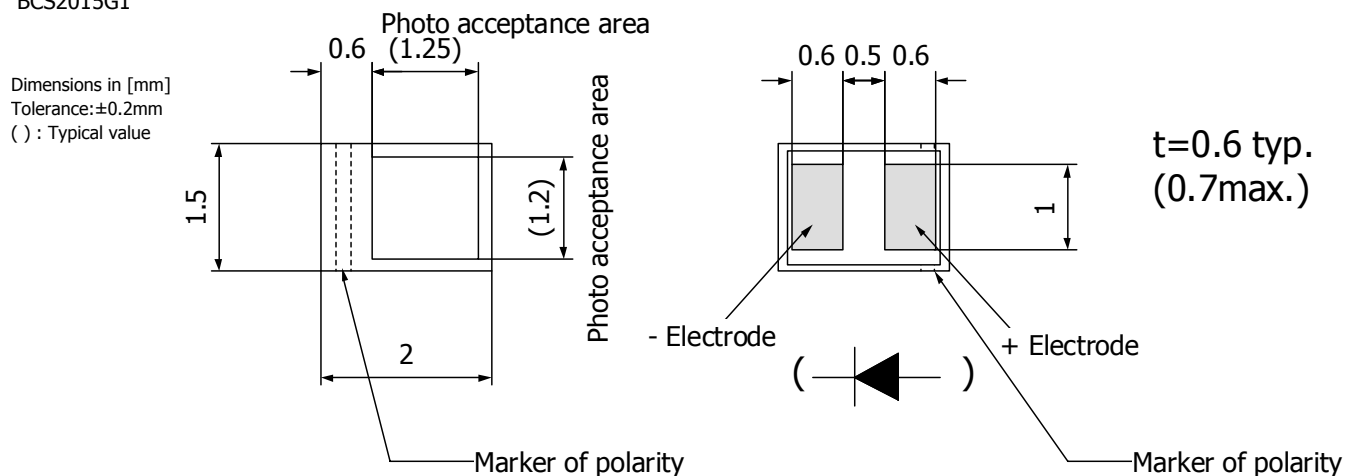
BCS2015G1 is the photodiode which uses an amorphous silicone semiconductor on the glass substrate. It is the most suitable for Brightness Adjustment, Control of the Lighting systems. BCS2015G1 is for surface mounting.

**Features**

- Highly receptive to visible light but not receptive to infrared light (close to Human eye visibility).
- Accurate illumination measurement can be taken without the use of an infrared filter.  
( Phototransistors and photodiodes that use crystal- silicon semiconductors typically require this filtering.)
- Surface mounting can be used in lead- free reflow soldering.
- Lead- free, Cadmium-free

**Shapes and dimension**

Glass Substrate  
BCS2015G1



**Electrical Characteristic**

Item			Temperature= 25deg.C			
			Value			
	Units		Min.	Typ.	Max.	
Output current	100Lux*1	VR=0V (Short Circuit Current)	μA	0.07	0.10	0.13
Output current	100Lux*1	VR=5V	μA	0.08	0.12	0.16
Dark current	VR=0.05V		pA	---	---	10

\*Initial value

**Absolute Maximum Ratings**

Item	Temperature= 25deg.C	
	Units	Value
Reverse bias voltage: VR	V	10
Non-reverse bias current	mA	2

**Optical Characteristic**

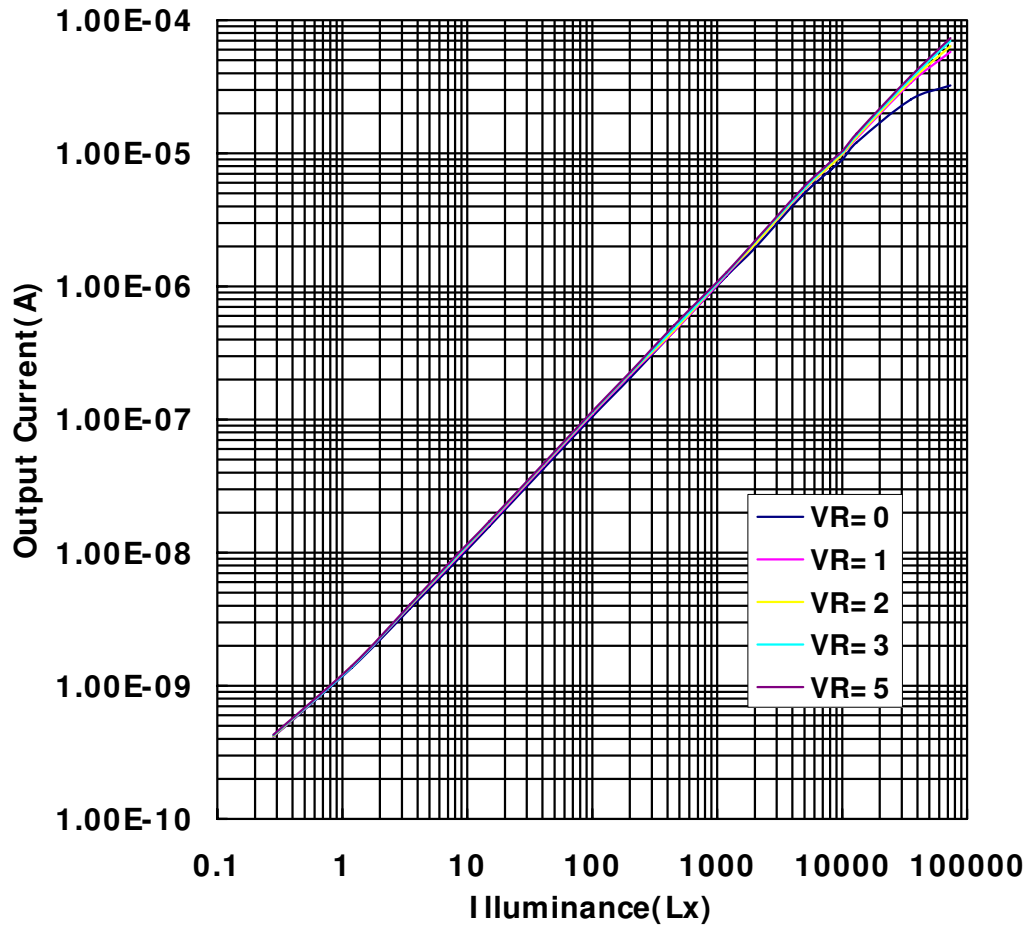
Item	Temperature= 25deg.C	
	Units	Value
Spectral sensivity area	nm	350 to 750
Peak of sensivity	nm	580±20

**Others**

Item	Value	
	Units	
Operating temperature	deg. C	-20 to 85
Keep and transfer temperature	deg. C	-40 to 85
Dimensions	mm	2.0×1.5×0.6t
Weight	g	0.004

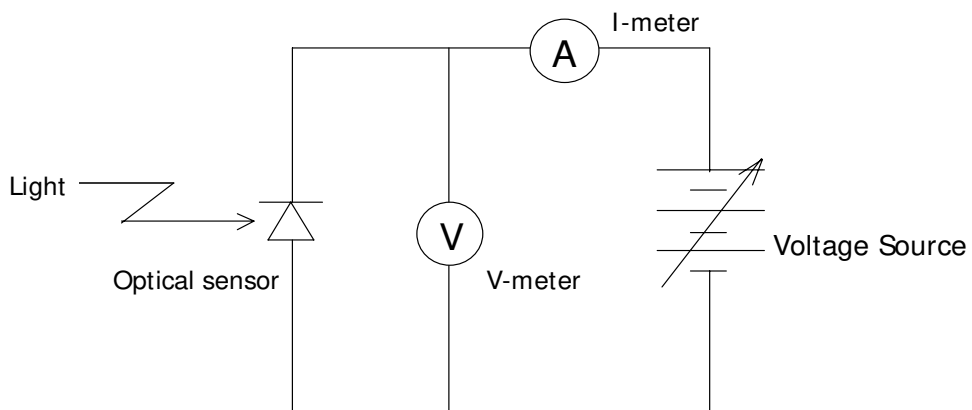
\*1 White Fluor Light (color temperature=4200K)

### Output characteristic(typical) :BCS2015G1

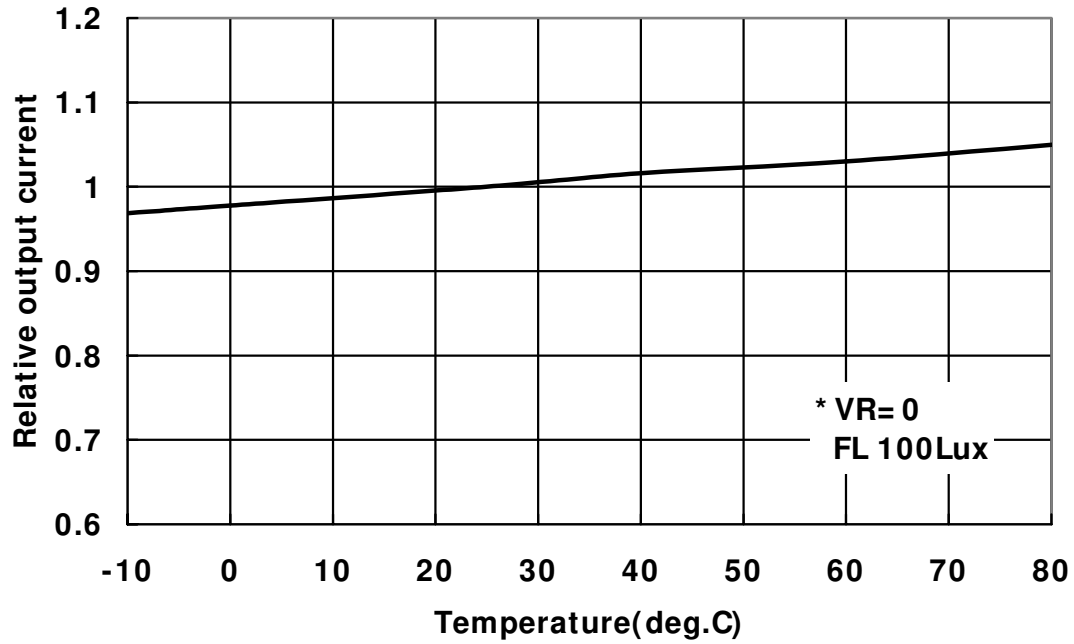


\* VR:Reverse bias voltage

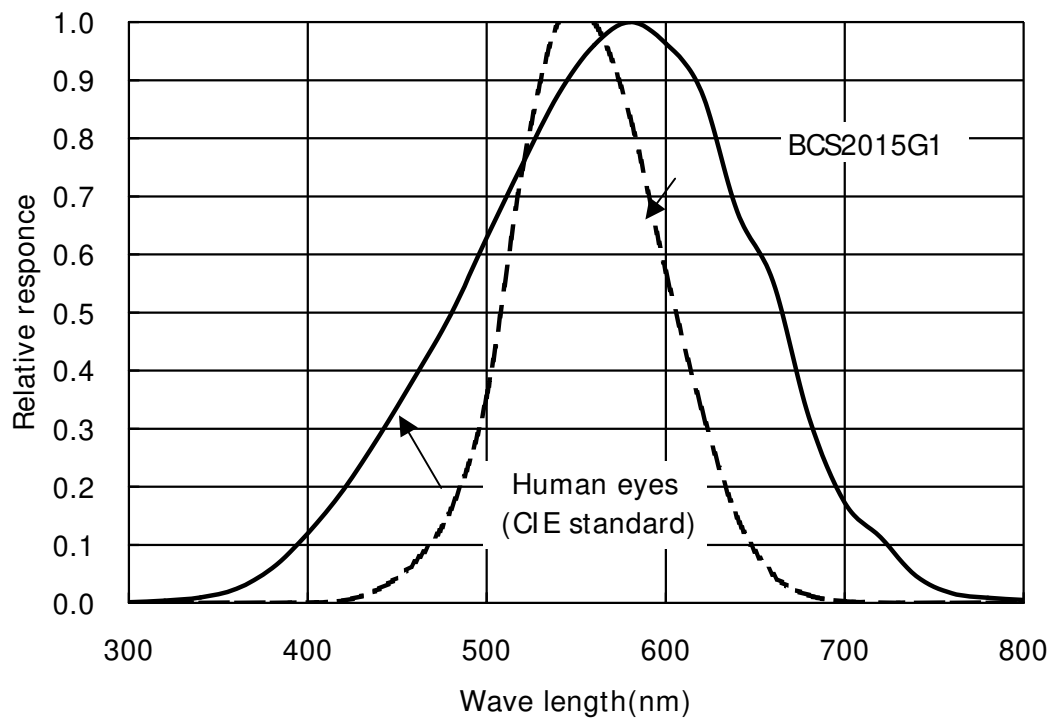
### Measuring circuit diagram



### Temperature stability of output current:BCS2015G1 (typical)

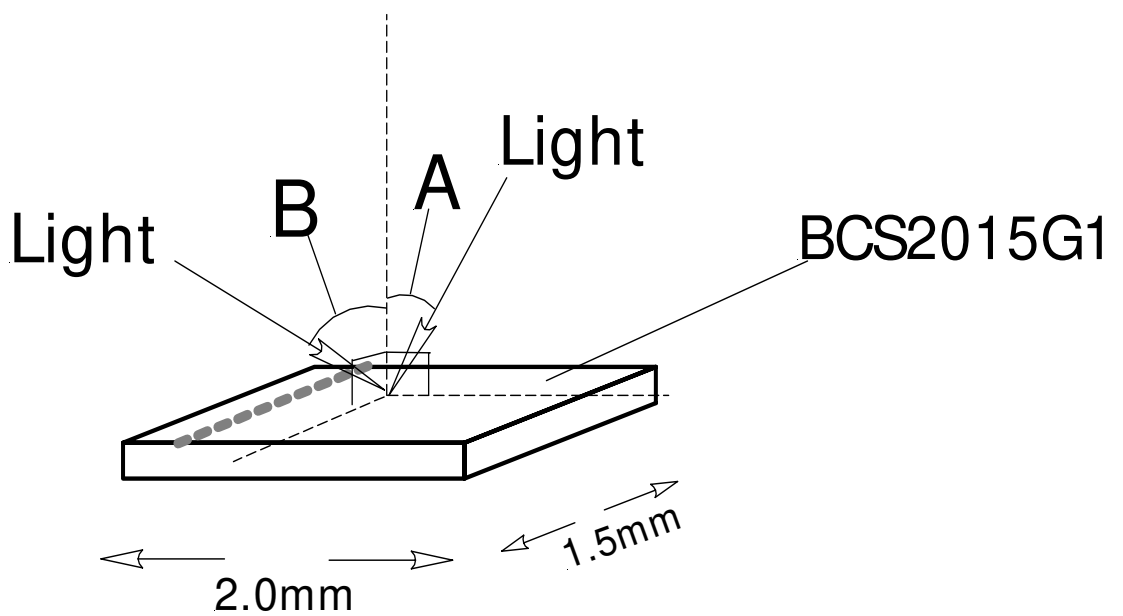
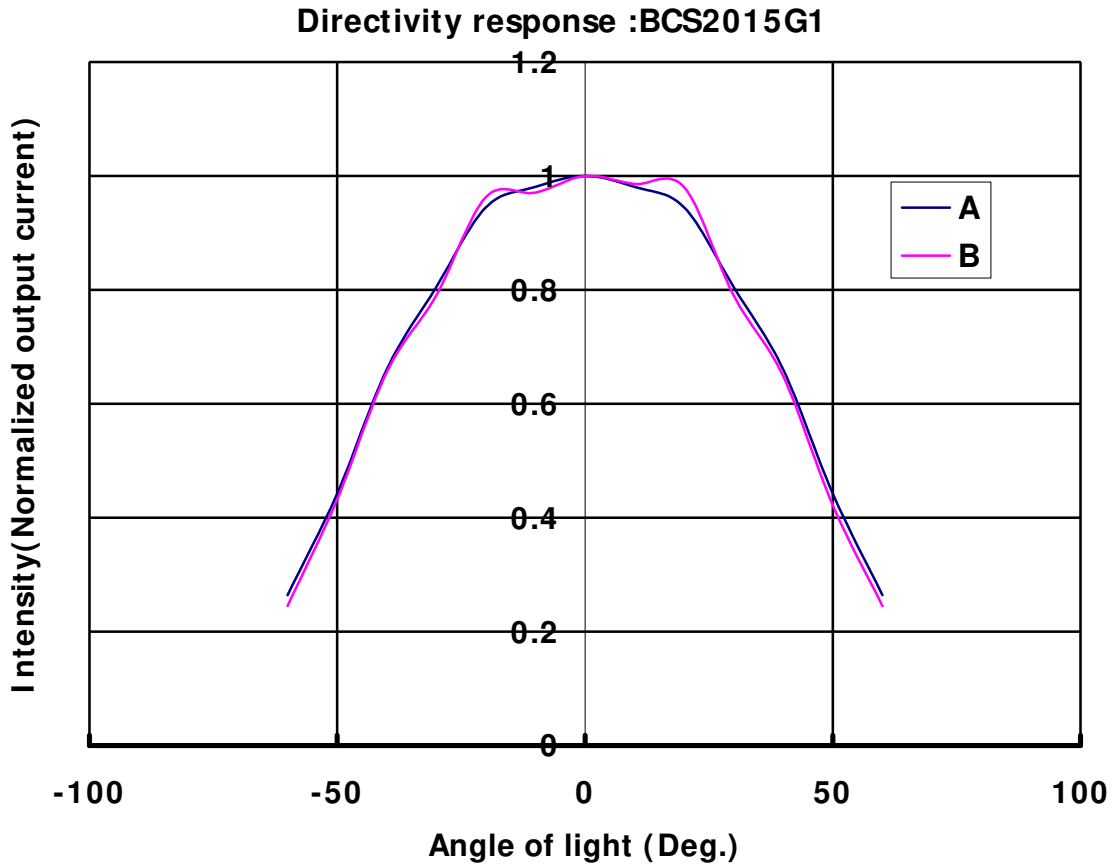


### Spectral response:BCS2015G1 (typical)



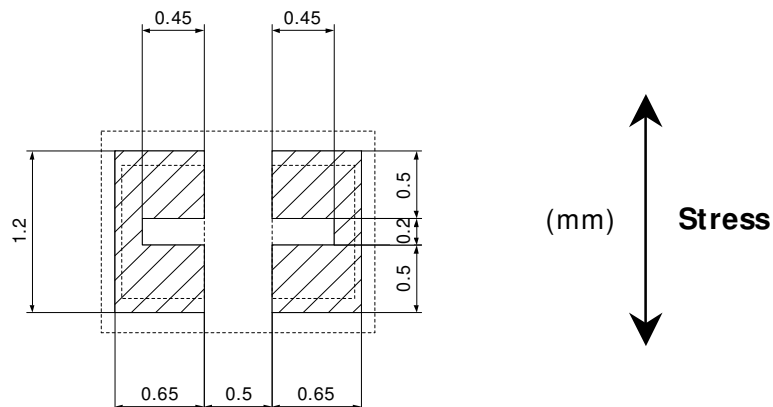
# Light directivity response : BCS2015G1

Light source/ White fluor lamp  
 Distance of light source/ 60cm

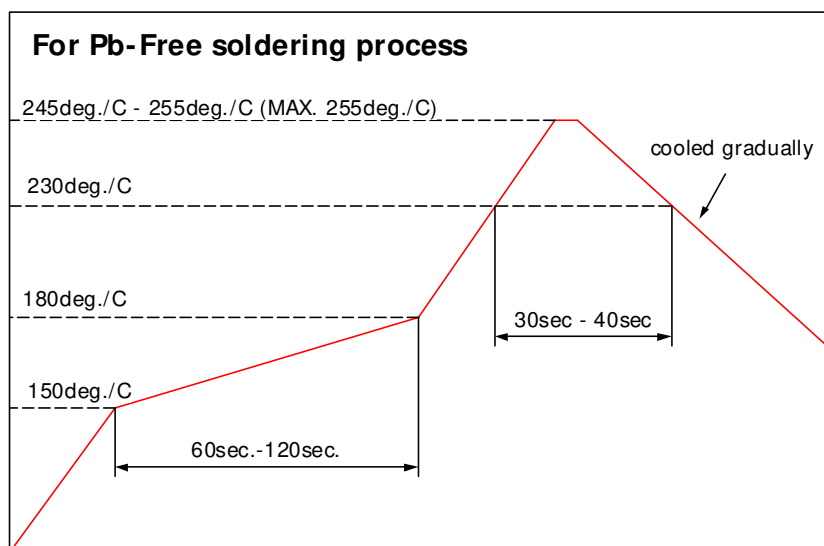


## Recommended land pattern

Recommended land pattern is shown in Fig. Please arrange a land in the direction as shown in Fig. to the direction of curvature as the result of heat stress by reflow and/or physical stress.



## Recommended reflow heat condition



\* Pb Free Solder is SnAgCu.

