

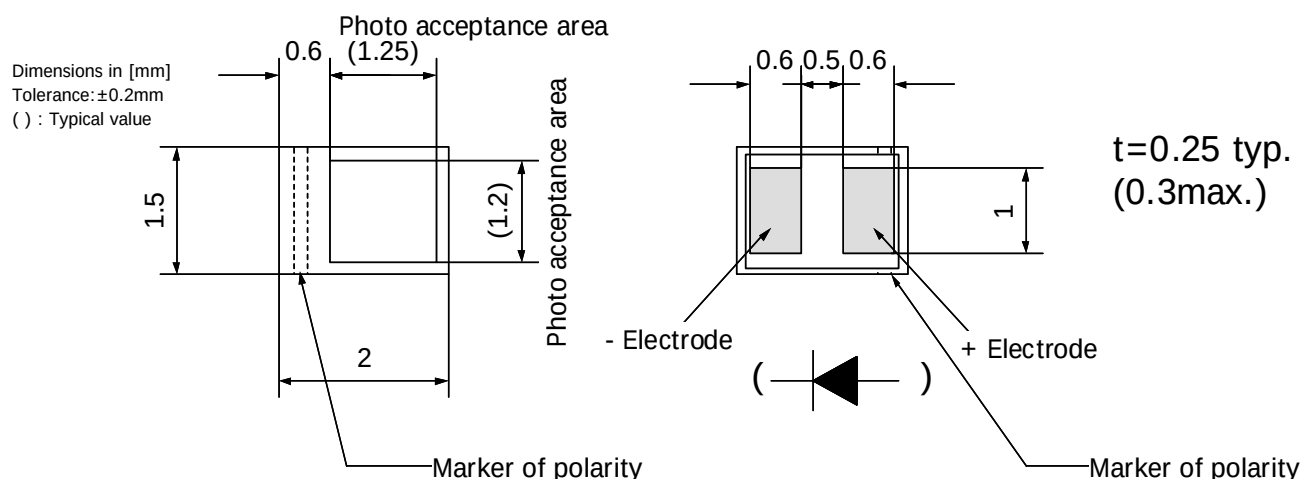
BCS2015H1 is the photodiode which uses an amorphous silicone semiconductor on the plastic substrate. It is the most suitable for Brightness Adjustment, Control of the Lighting systems, and some light sensing. BCS2015H1 is for conventional surface mounting.

Features

- Ultra Low profile (less than 0.3mm thickness)
- 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.

Shapes and dimension

Glass Substrate
BCS2015H1



Electrical Characteristic

Temperature= 25deg.C

Item			Value			
			Units	Min.	Typ.	Max.
Output current	100Lux*1	VR=0V (Short Circuit Current)	μ A	0.06	0.09	0.12
Output current	100Lux*1	VR=5V	μ A	0.07	0.10	0.13
Dark current	VR=0.5V		pA	---	---	10

* Initial value

Absolute Maximum Ratings

Temperature= 25deg.C

Item	Value	
	Units	
Reverse bias voltage: VR	V	6
Non-reverse bias current	mA	1

Optical Characteristic

Temperature= 25deg.C

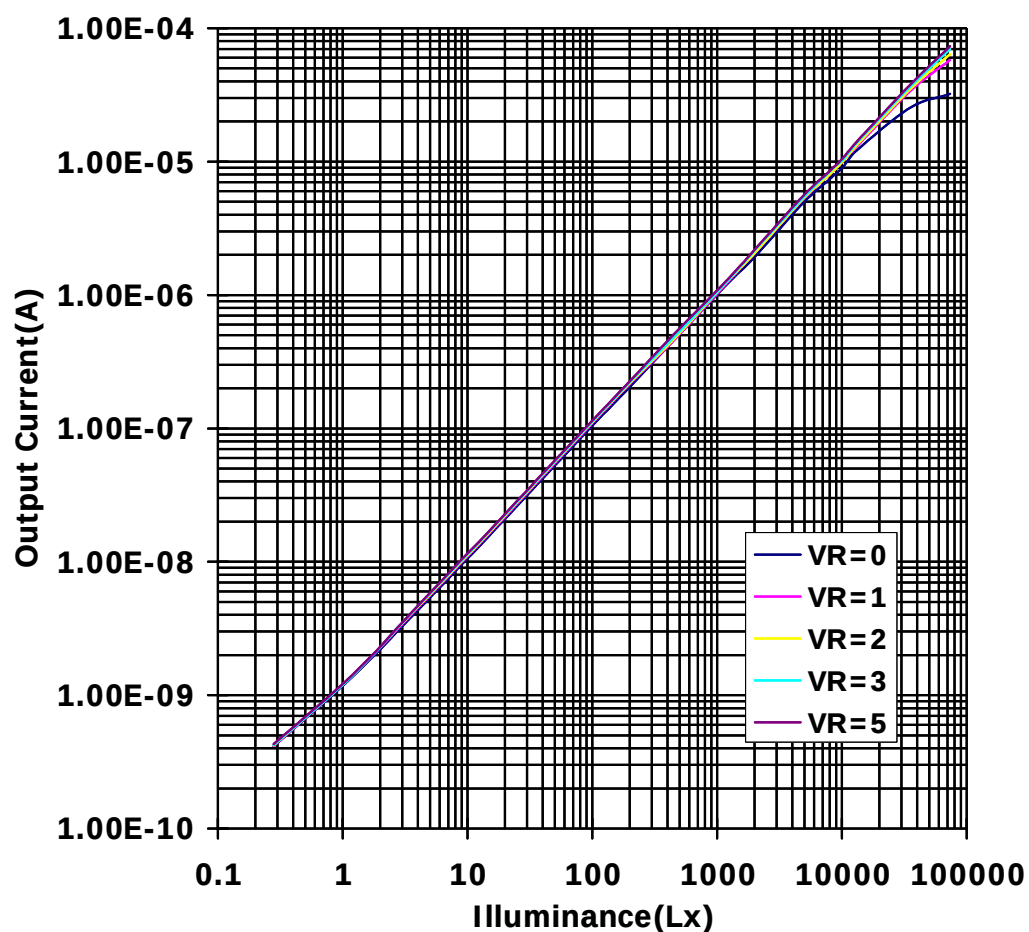
Item	Value	
	Units	
Spectral sensitivity area	nm	350 to 750
Peak of sensitivity	nm	580 $\pm$ 20

Others

Item	Value	
	Units	
Operating temperature	deg. C	-20 to 85
Keep and transfer temperature	deg. C	-40 to 85
Dimensions	mm	2.0 $\times$ 1.5 $\times$ 0.25t (0.3t Max.)
Weight	g	0.004

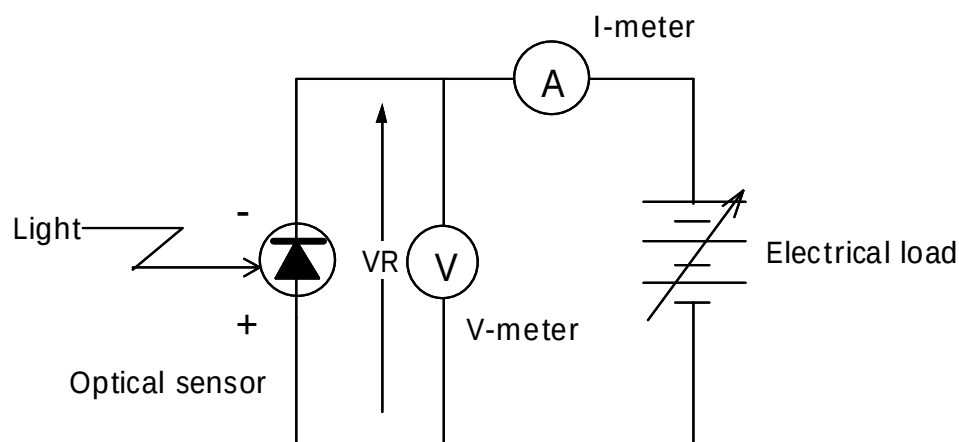
*1 White Fluor Light (color temperature=4200K)

Output characteristic(typical):BCS2015H1

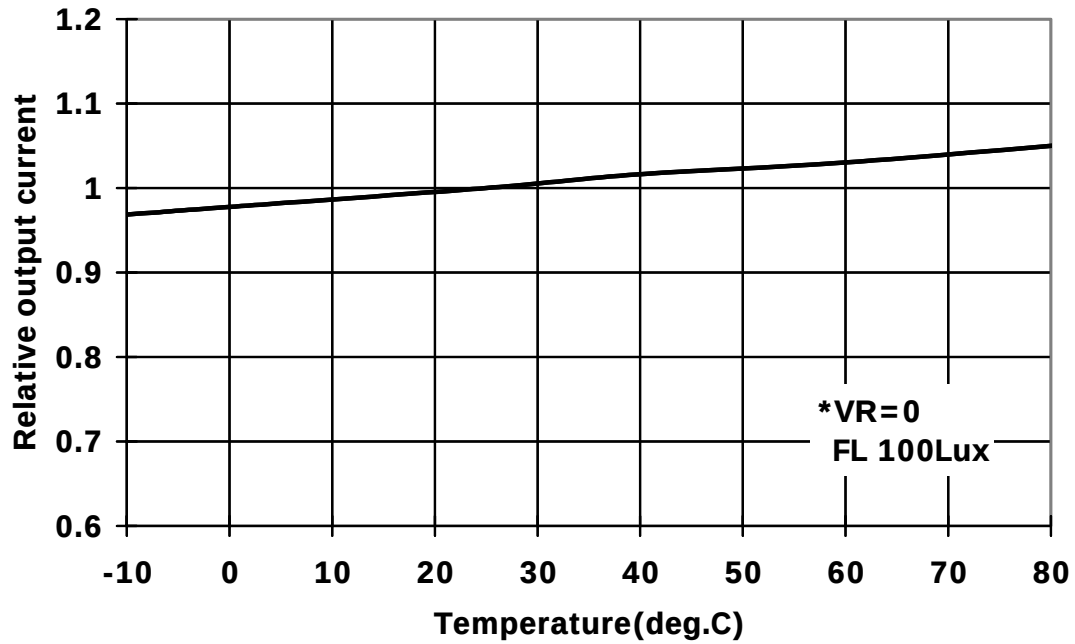


*VR:Reverse bias voltage

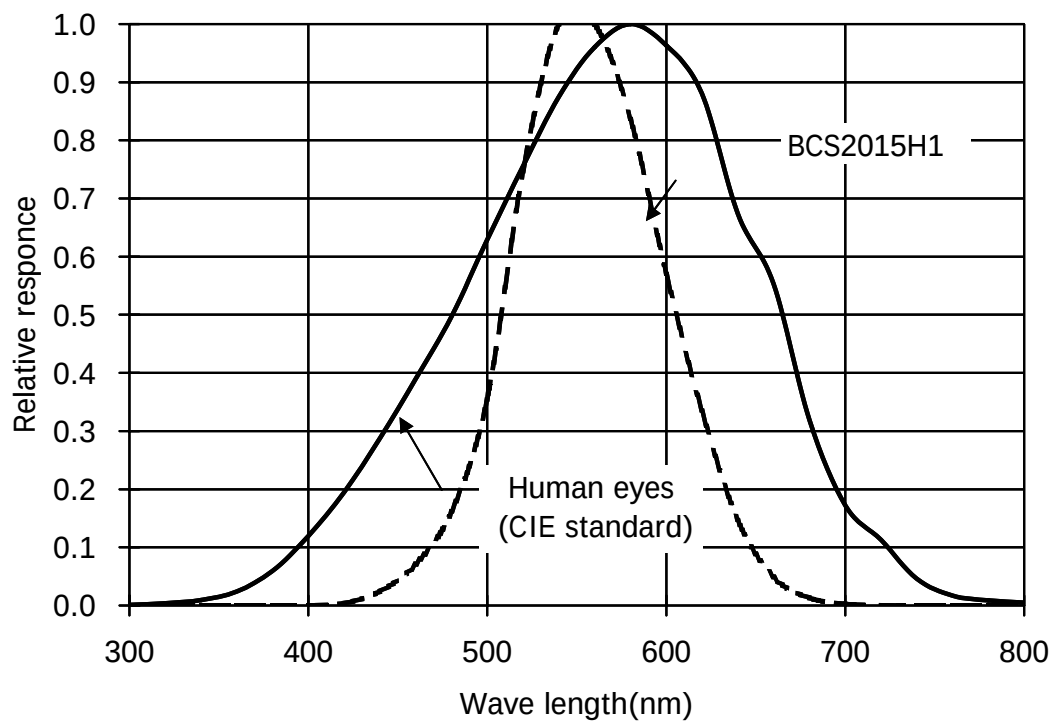
Measuring circuit diagram



Temperature stability of output current:BCS2015H1 (typical)

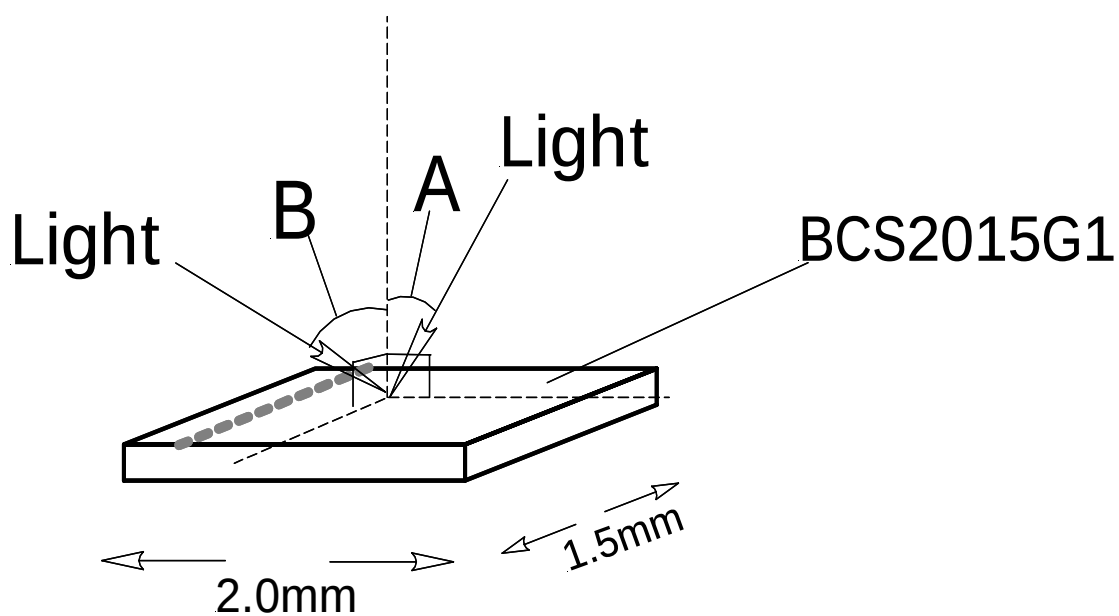
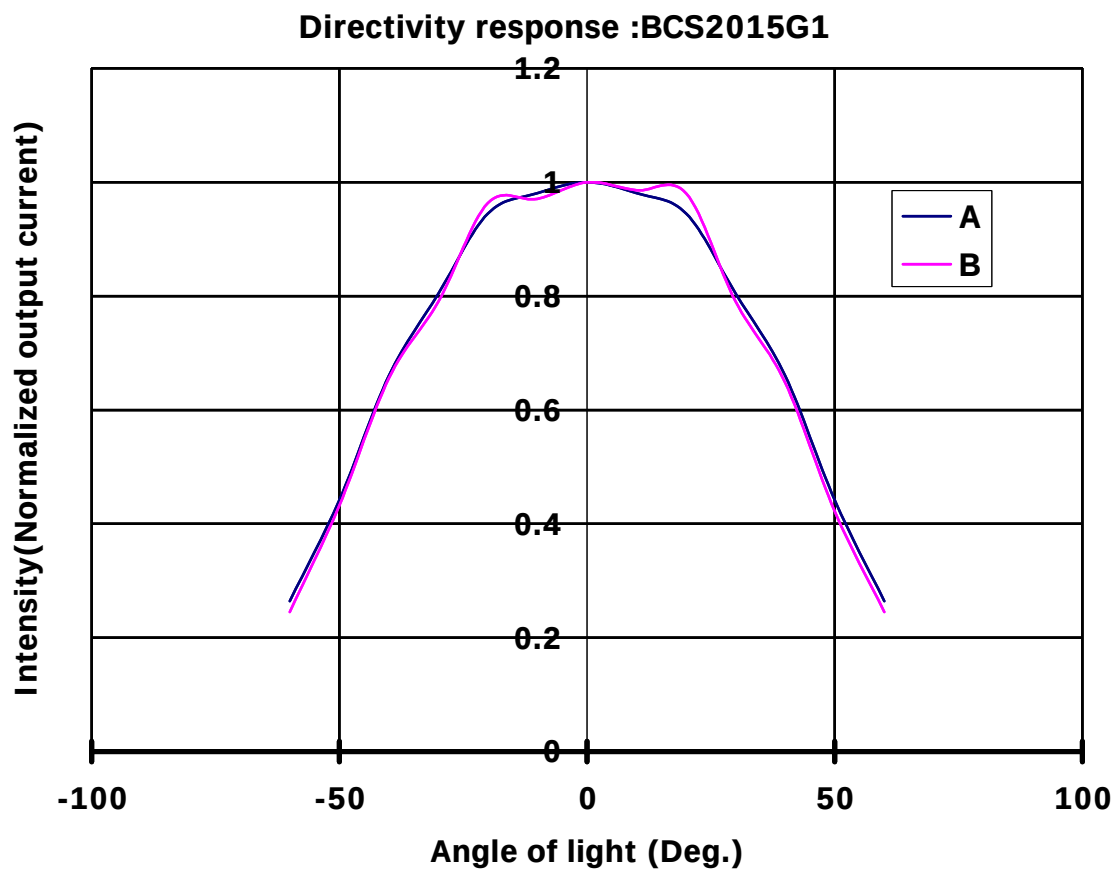


Spectral response:BCS2015G1 (typical)



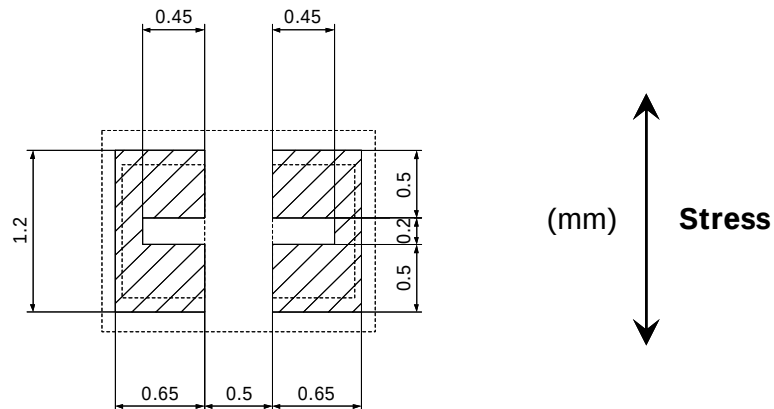
Light directivity response : BCS2015G1

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



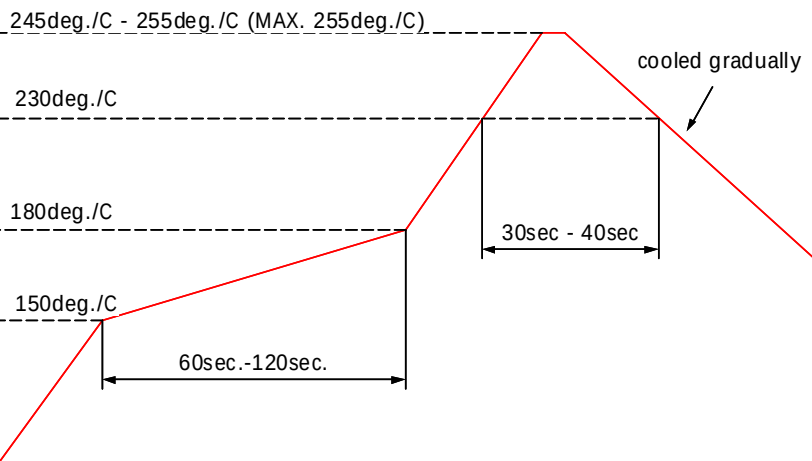
Recommended land pattern

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

For Pb-Free soldering process



*Pb Free Solder is SnAgCu.

For Pb-Sn soldering process

