

BS115

Can Package Photodiode for Visible Light

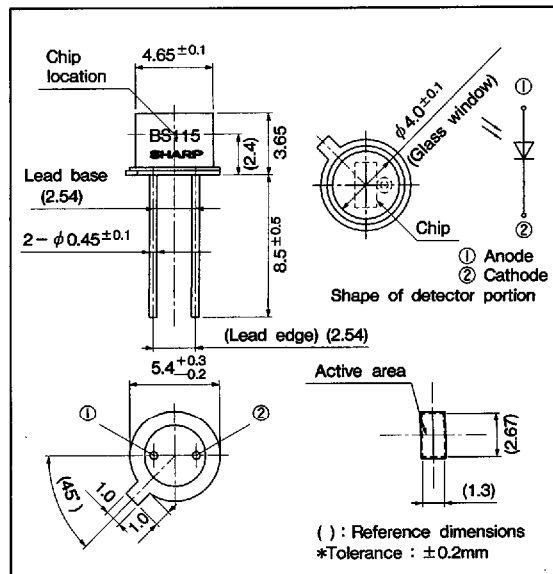
■ Features

1. Spectral sensitivity characteristics akin to that of human eye
2. Wide operating temperature (T_{opr} : -30 to +110°C)
3. High reliability (can package is adopted)
4. Low dark current (I_d : MAX. 1nA at $V_R=5V$)

■ Applications

1. LCD backlight monitor
2. Exposure meter

■ Outline Dimensions (Unit : mm)



■ Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	5	V
Operating temperature	T_{opr}	-30 to +110	°C
Storage temperature	T_{stg}	-40 to +125	°C
Soldering temperature	T_{sol}	260	°C

■ Electro-optical Characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Short circuit current	I_{sc}	*1 $E_v=100lx$	1.4	1.7	2.1	μA
Short circuit current temperature coefficient	β_{TF}	*1 $E_v=100lx$	-	0.05	-	%/°C
Dark current	I_d	$V_R=5V$	-	-	1.0	nA
Open circuit voltage	V_{oc}	*1 $E_v=100lx$	370	470	-	mV
Peak sensitivity wavelength	λ_P		-	750	-	nm
Terminal capacitance	C_t	$V_R=0V, f=10kHz$	-	270	-	pF
Response time	t_r	$V_R=0, R_L=1k\Omega$	-	2.0	-	μs

*1 E_v : Illuminance by CIE standard light source A (tungsten lamp)

Fig. 1 Spectral Sensitivity (Typical Value)

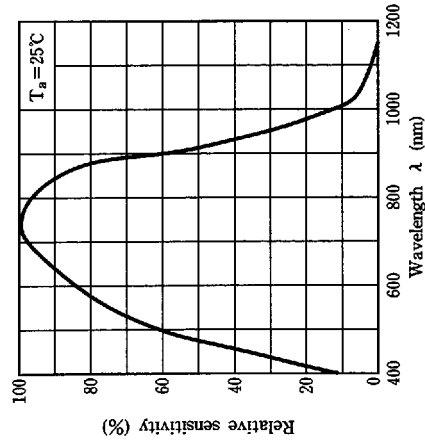
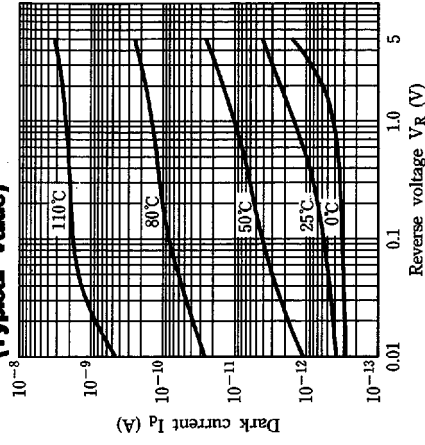


Fig. 2 Dark Current vs. Reverse Voltage (Typical Value)



● Please refer to the chapter "Precautions for Use." (Page 78 to 93)