■ New ☐ Rev

APPROVAL SHEET

CUSTOMER :

DEVICE NAME : **PHOTO DIODE**

MODEL NO. : **SPD-5CB4-G9**

ISSUED DATE : **JUL.30. 2012**

	ISSUE	REVIEW	REVIEW	APPR'D
ISSUED DEPT.			蒋宏华	

SEKSEMI

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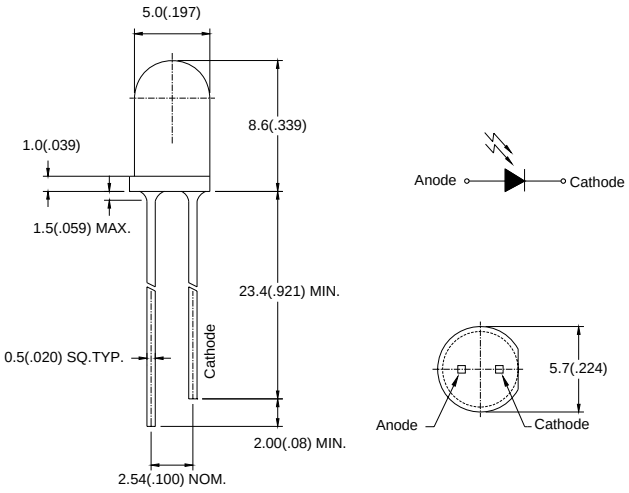
Features:

1. Wide receiving angle
2. Linear response vs. irradiance
3. Fast switching time
4. End-looking Package ideal for space limited applications
5. Lens Appearance: Black
6. This product doesn't contain restriction substance, comply ROHS standard

Package dimensions:



NOTES:
1.All dimensions are in millimeters (inches).
2.Tolerance is ±0.25mm (0.01') unless otherwise specfied.
3.Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Applications:

The SPD-5CB4-G9 device consists of a PIN silicon photodiode molded in a black epoxy package which allows spectral response infrared light wavelengths. The wide receiving angle provides relatively even reception over a large area. The end-looking package is designed for easy PC board mounting. This photodiode is mechanically and spectrally matched to BRIGHT's GaAs and GaAlAs series of infrared emitting diodes.

Absolute Maximum Ratings(Ta=25℃)

Parameter	Maximum Rating	Unit
Power Dissipation	100	mW
Reverse Breakdown Voltage	60V	
Operating Temperature	-45℃~+85℃	
Storage Temperature Range	-45℃~+100℃	
Lead Soldering Temperature	260℃ for 5 seconds	

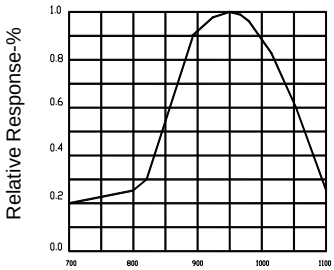
*1Condition for IFP is pulse of 1/10 duty and 0.1msec width.

Electrical and optical characteristics(Ta=25℃)

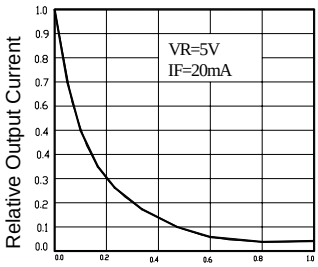
PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Reverse Light Current	I_L	-	70		μA	V_R=5V.Ee=1mW/cm^2
Reverse Dark Current	I_D	-	-	30	nA	V_R=10V.Ee=0 mW/cm^2
Reverse Break down Voltage	$V_{(BR)}$	30	-	-	-	I_R=100 μA
Forward Voltage	V_F	-	-	1.2	V	I_F=1mA
Total Capacitance	C_T	-	21	-	PF	V_R=5V.Ee=0,f=1.0MHZ
Rise Time/ Fall Time	tr/tf	-	50	-	ns	V_R=20V, λ=940nm.RL=50Ω

Typical electro-optical characteristics curves

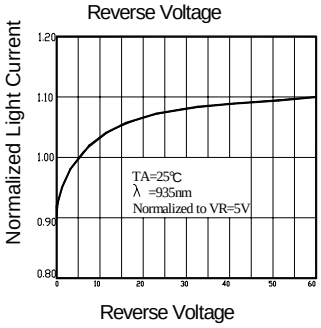
Relative Response vs. Wavelength



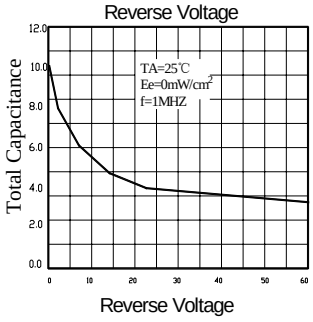
Coupling Characteristics



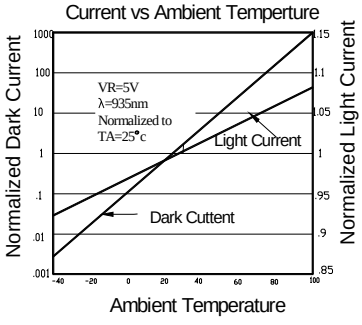
Normalized Light Current vs Reverse Voltage



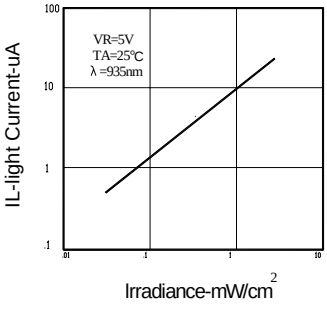
Total Capacitance vs Reverse Voltage



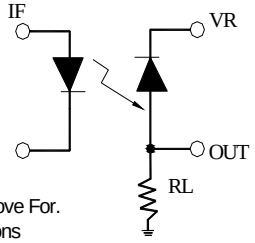
Normalized Light and Dark Current vs Ambient Temperture



Light Current vs. Irradiance

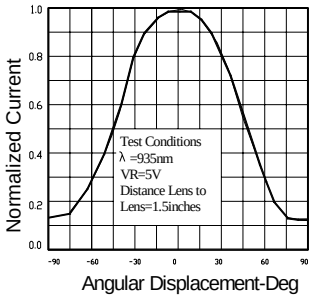


Switching Time Test Circuit



Note:
See Above For.
Conditions

Light Current vs. Angular Displacement



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