



New Rev


APPROVAL SHEET

CUSTOMER : _____

DEVICE NAME : **PHOTO DIODE**

MODEL NO. : **SPD-59A4-G9**

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

	ISSUE	REVIEW	REVIEW	APPR'D
ISSUED DEPT.			蒋宏华	



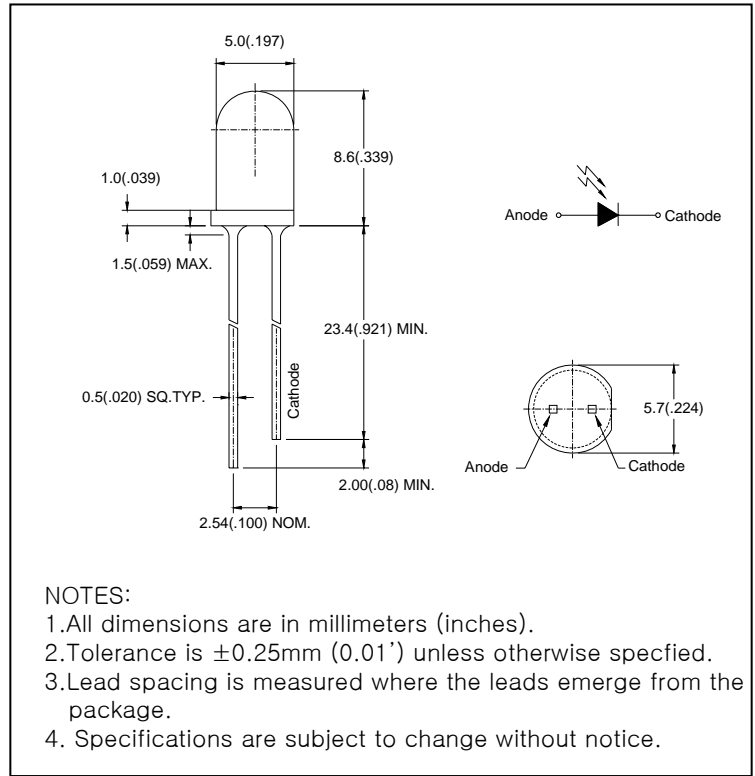
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● Features:

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

● Applications:

The SPD-59A4-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.

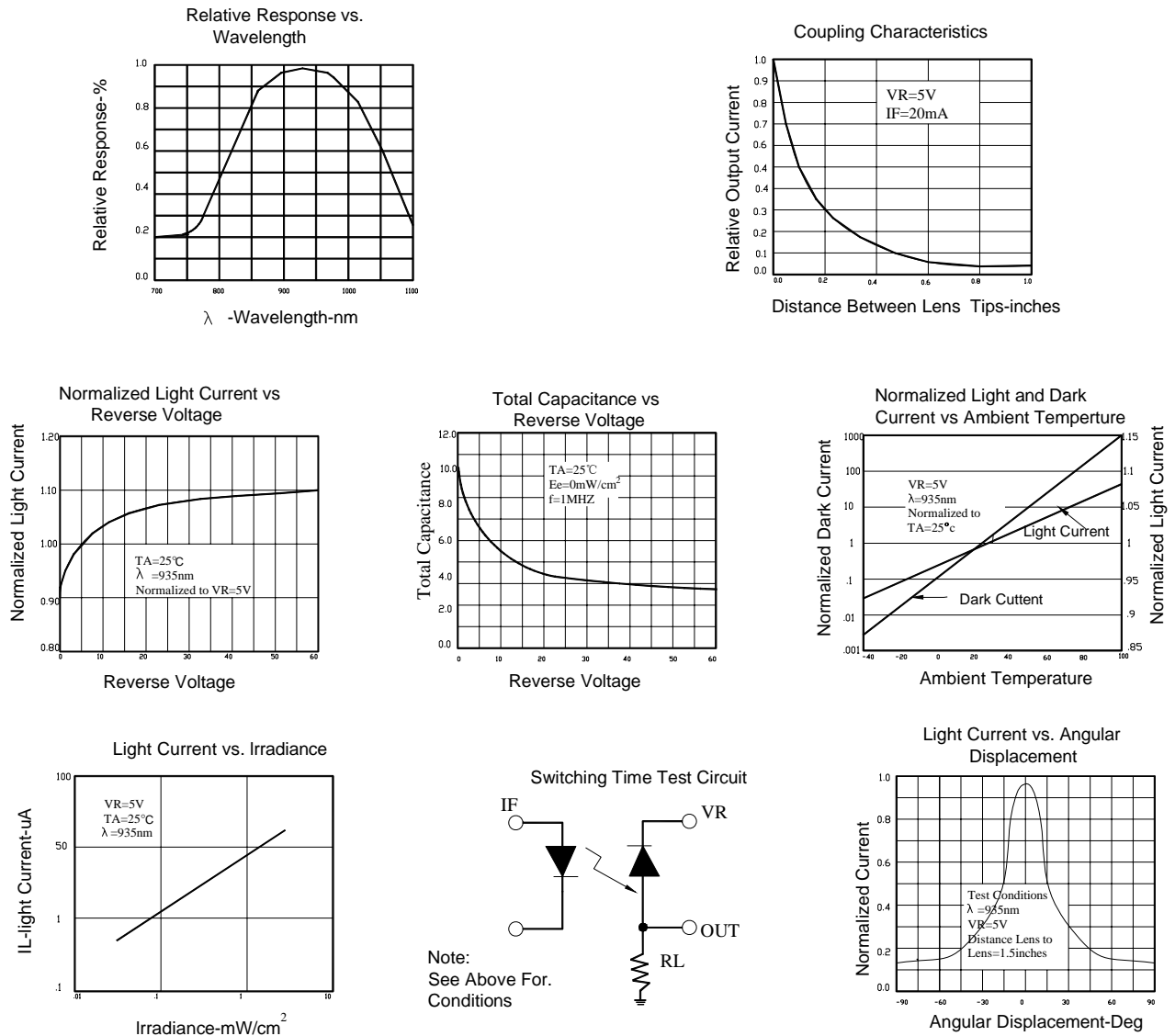
● Package dimensions:

● Absolute Maximum Ratings(Ta=25°C)

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

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

● Electrical and optical characteristics(Ta=25°C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Reverse Light Current	I_L	-	42		μA	$V_R=5V, E_e=1mW/cm^2$
Reverse Dark Current	I_D	-	-	30	nA	$V_R=10V, E_e=0 mW/cm^2$
Reverse Break down Voltage	$V_{(BR)}$	30	-	-	-	$I_R=100 \mu A$
Forward Voltage	V_F	-	-	1.2	V	$I_F=1mA$
Total Capacitance	C_T	-	9	-	PF	$V_R=5V, E_e=0, f=1.0MHZ$
Rise Time/ Fall Time	tr/ tf	-	50	-	ns	$V_R=20V, \lambda =940nm, RL=50 \Omega$

● Typical electro-optical characteristics curves


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