



New  Rev

# APPROVAL SHEET

CUSTOMER : \_\_\_\_\_

DEVICE NAME : **Infrared LED**

MODEL NO. : **SIR- 5A446-B1**

ISSUED DATE : **JUL.13. 2012**

	ISSUE	REVIEW	REVIEW	APPR'D
ISSUED DEPT.		蒋宏华	邱丽红	

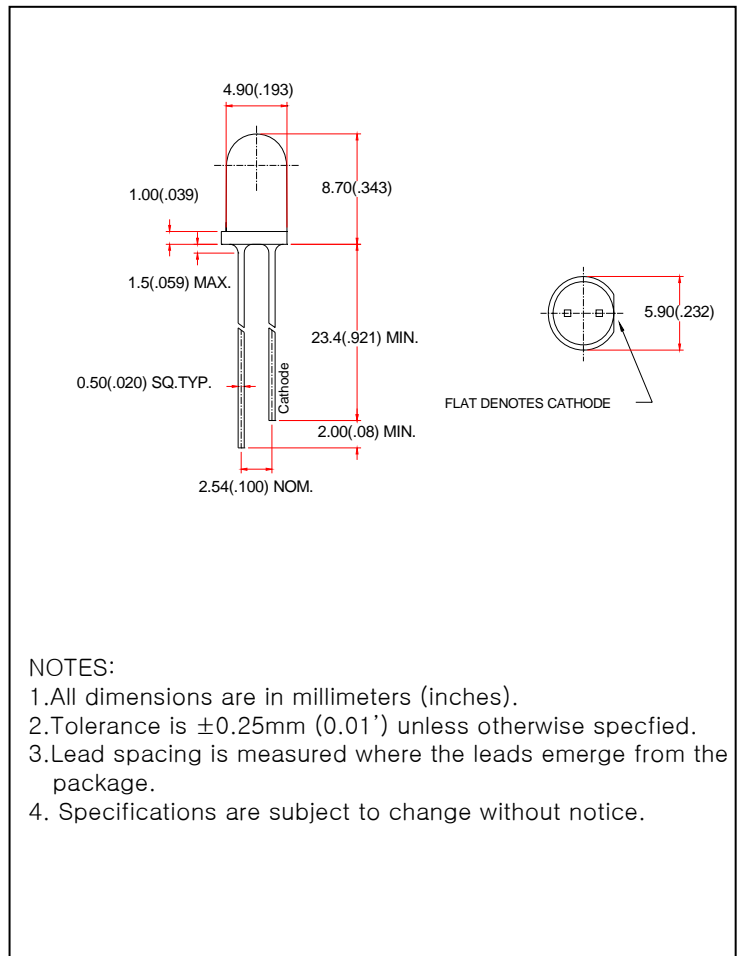
	TEL : +86-755-88878308 FAX : +86-755-88828216 Email : <a href="mailto:sek@seksemi.com">sek@seksemi.com</a> <a href="http://www.seksemi.com">http://www.seksemi.com</a>
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**● Features:**

- 1.High radiant power and high radiant intensity.
2. Standard T-1 1/4(5mm)package.
3. Peak wavelength  $\lambda_p=940\text{nm}$ .
4. Good spectral matching to si-photodetector.
5. Radiant angle:  $40^\circ$  .
6. Lens Appearance: Water Clear .
7. This product doesn't contain restriction substance, comply ROHS standard.

**● Applications:**

1. Remote Control.
2. Automatic Control System.

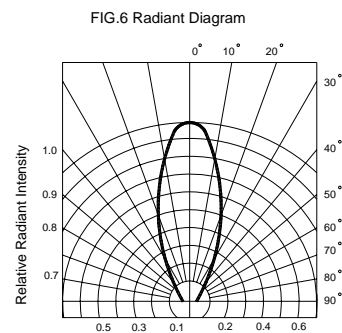
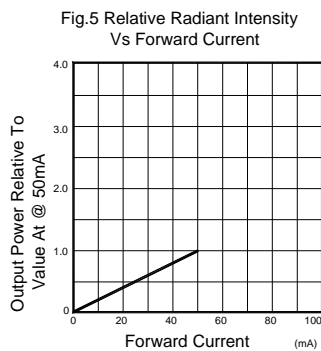
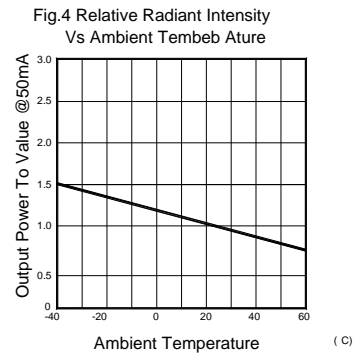
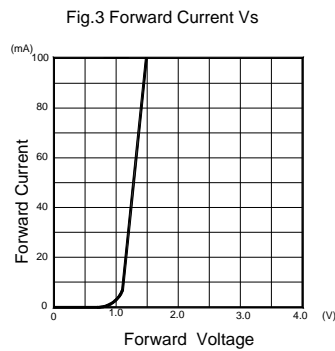
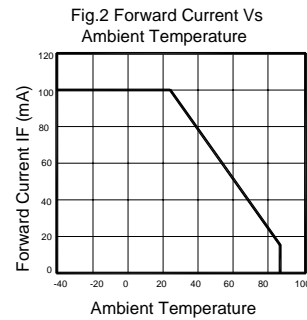
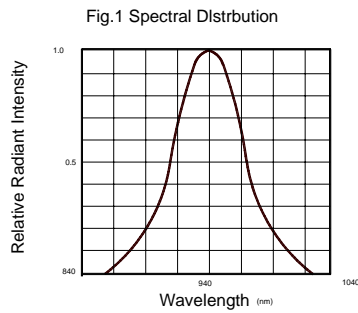
**● Package dimensions:**

**● Absolute Maximum Ratings(Ta=25°C)**

Parameter	Symbol	Rating	Unit
Power Dissipation	$P_d$	100	mW
Continuous Forward Current	$I_F$	100	mA
Peak Forward Current *1	$I_{FP}$	1.0	A
Reverse Voltage	$V_R$	5	V
Operating Temperature	$T_{opr}$	-45°C~85°C	-
Storage Temperature	$T_{stg}$	-45°C~100°C	-
Soldering Temperature	$T_{sol}$	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	Test Conditions	Min	TYP	Max	Unit
Radiant Intensity	I <sub>e</sub>	I <sub>F</sub> =50mA	11.78	23.8	-	mW/sr
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =50mA	-	1.25	1.5	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	100	μA
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> =20mA	-	940	-	nm
Spectral Line Half- Width	Δλ	I <sub>F</sub> =20mA	-	50	-	nm
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> =20mA	-	40	-	deg

**● Typical electro-optical characteristics curves**


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