



New Rev

APPROVAL SHEET

CUSTOMER : _____

DEVICE NAME : **Infrared LED**

MODEL NO. : **SIR- 3A442-E4**

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

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



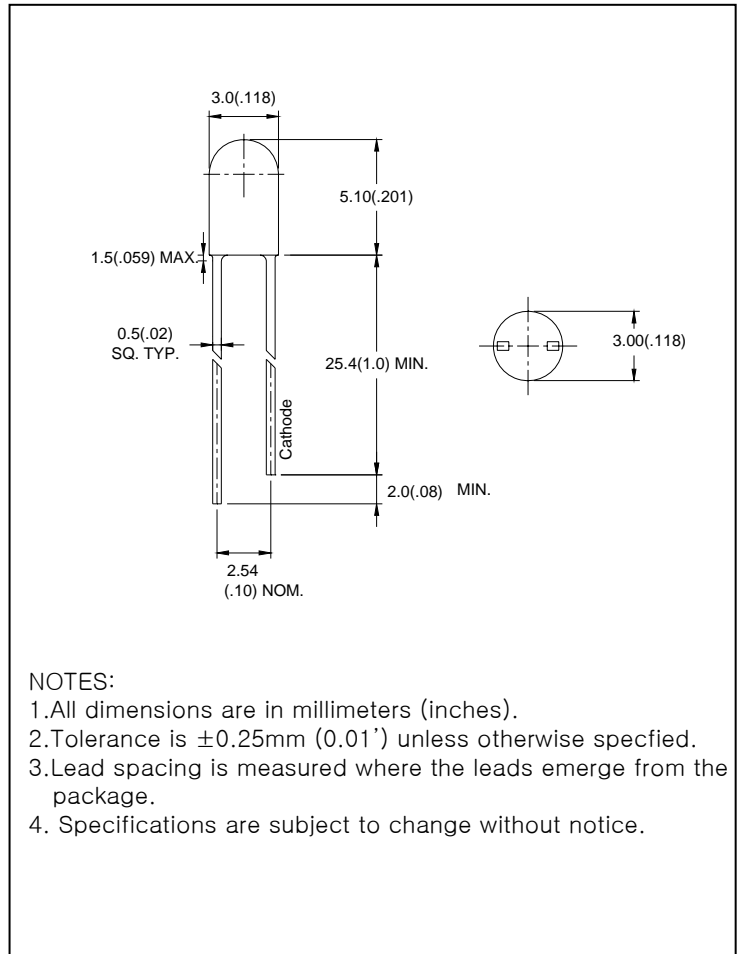
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<http://www.seksemi.com>

● Features:

1. High radiant power and high radiant intensity.
2. Standard T-1 3/4(3mm) package.
3. Peak wavelength $\lambda_p=940\text{nm}$.
4. Good spectral matching to si-photodetector.
5. Radiant angle: 20° .
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	Pd	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	Topr	-45°C~85°C	-
Storage Temperature	Tstg	-45°C~100°C	-
Soldering Temperature	Tsol	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 _e	I _F =50mA	8.41	23.89	-	mW/sr
Forward Voltage	V _F	I _F =50mA	-	1.25	1.5	V
Reverse Current	I _R	V _R =5V	-	-	100	μA
Peak Wavelength	λ _p	I _F =20mA	-	940	-	nm
Spectral Line Half- Width	Δλ	I _F =20mA	-	50	-	nm
Viewing Angle	2θ _{1/2}	I _F =20mA	-	20	-	deg

● Typical electro-optical characteristics curves

Fig.1 Spectral Distribution

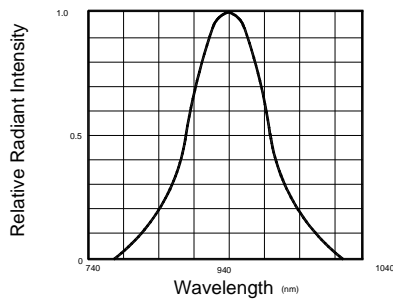


Fig.2 Forward Current Vs Ambient Temperature

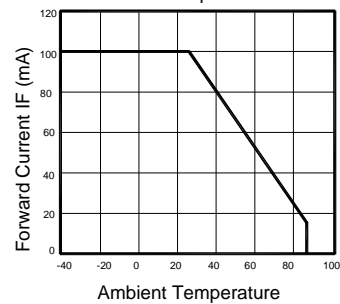


Fig.3 Forward Current Vs

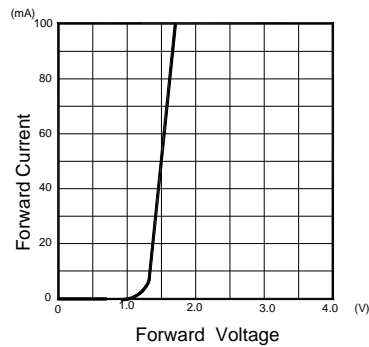


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

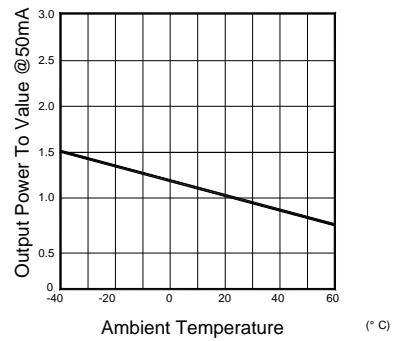


Fig.5 Relative Radiant Intensity Vs Forward Current

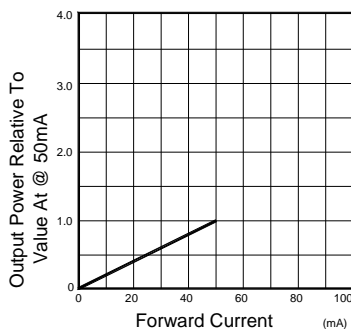
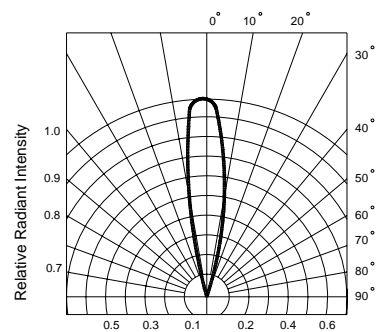


FIG.6 Radiant Diagram



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