

**Harvatek International Infrared Through-Hole Lamp****HE1-240AC-XXXX**

Official Product	HE1-240AC-XXXX			Data Sheet No.
Customer Part No.	*****			HE1-240AC-XXXX
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		August 5, 2009	Version of 1.0	Page 1/7

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

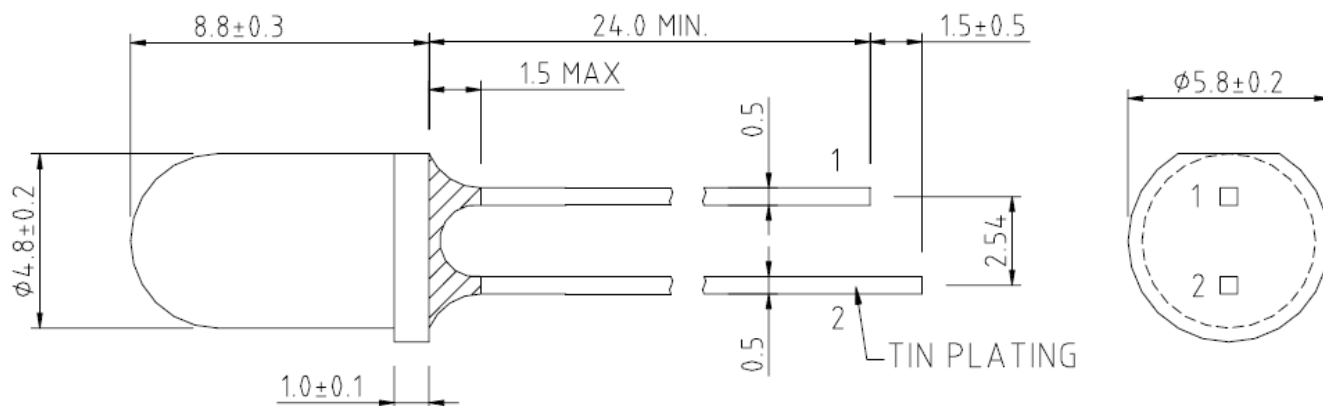
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## Orderable Information

**H E 1 - 2 4 0 A C - X X X X**

Series Name	Description Code	Customer Code
HE1: Harvatek IR Lamp, 850 nm	240AC: 5mm with 40 degree viewing angle	XXXX Customer Product Code

## Dimensional Drawing:



Dimensions are in mm

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## Absolute Maximum Rating (@ 25°C)

Parameter	Symbol	Spec	Unit
Power Dissipation	$P_D$	200	mW
Reverse Voltage	$V_R$	5	V
Forward Current	$I_F$	100	mA
Reverse Current	$I_R$	10	$\mu A$
Pulse Forward Current	$I_{FP}$	1	A
Operating Temperature Range	$T_{OPR}$	-25 to +75	° C
Storage Temperature Range	$T_{STG}$	-25 to +100	° C

\* Lead Soldering Temperature (5mm from body), 260° C for 5 seconds.

## Electrical and Optical Characteristics (@ 25°C)

Parameter	Symbol	Spec			Unit	Condition
		min.	typ.	max.		
Radiant Intensity	$I_E$	20.0	40.0	—	mW/sr	$I_F = 50 \text{ mA}$
Forward Voltage	$V_F$	—	1.6	2.0	V	$I_F = 100 \text{ mA}$
Peak Wavelength	$\lambda_p$	—	850	—	nm	$I_F = 50 \text{ mA}$
Spectral Bandwidth @ 50%	$\Delta\lambda$	—	42	—	nm	$I_F = 50 \text{ mA}$
Viewing Angle	$2\theta_{1/2}$	—	40	—	degrees	$I_F = 50 \text{ mA}$

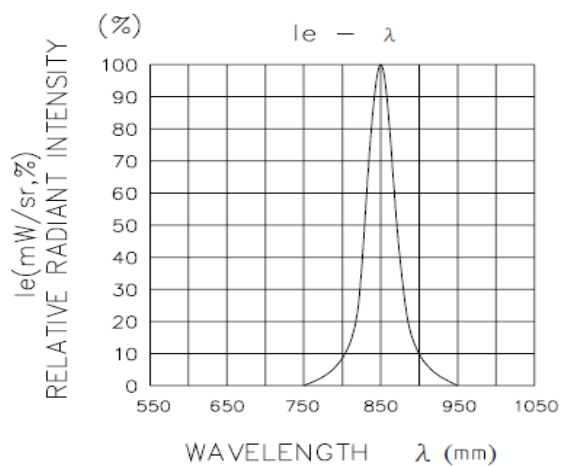
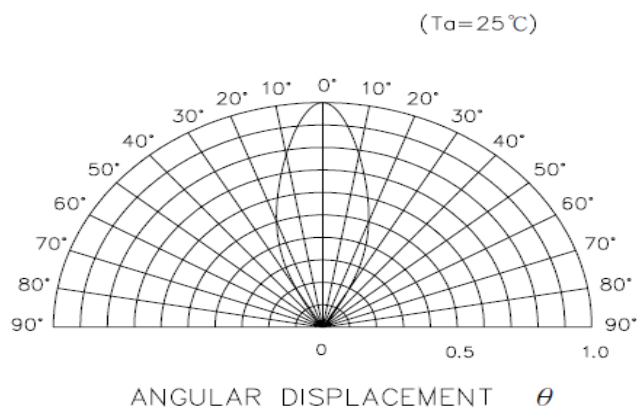
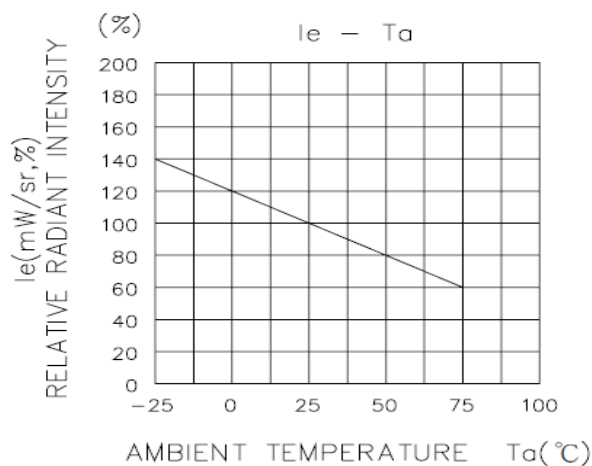
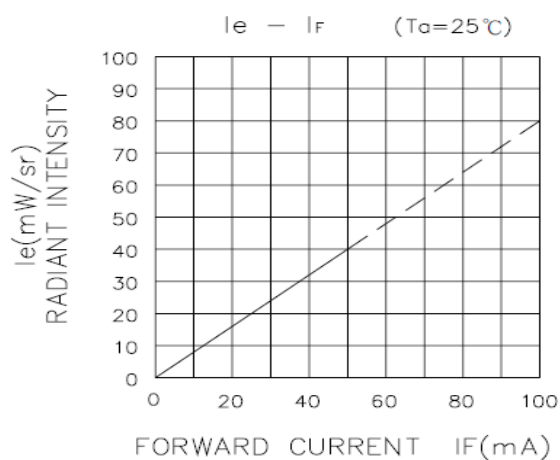
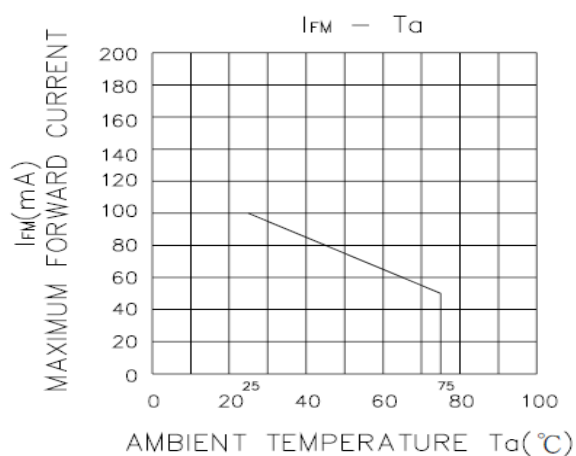
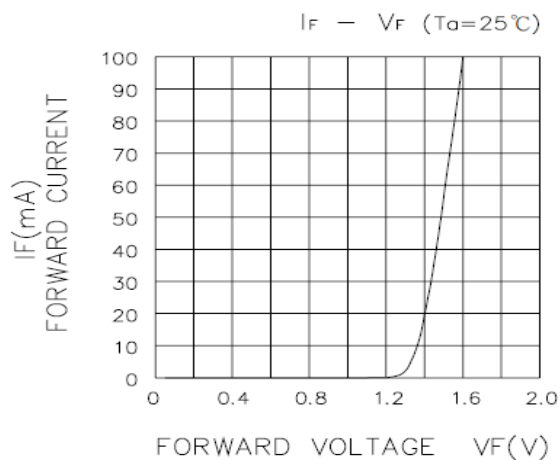
Radiant Intensity Measurement Tolerance =  $\pm 15\%$

Forward Voltage Measurement Tolerance =  $\pm 0.05V$

Peak Emission Wavelength Tolerance =  $\pm 1 \text{ nm}$

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## Characteristic Curves

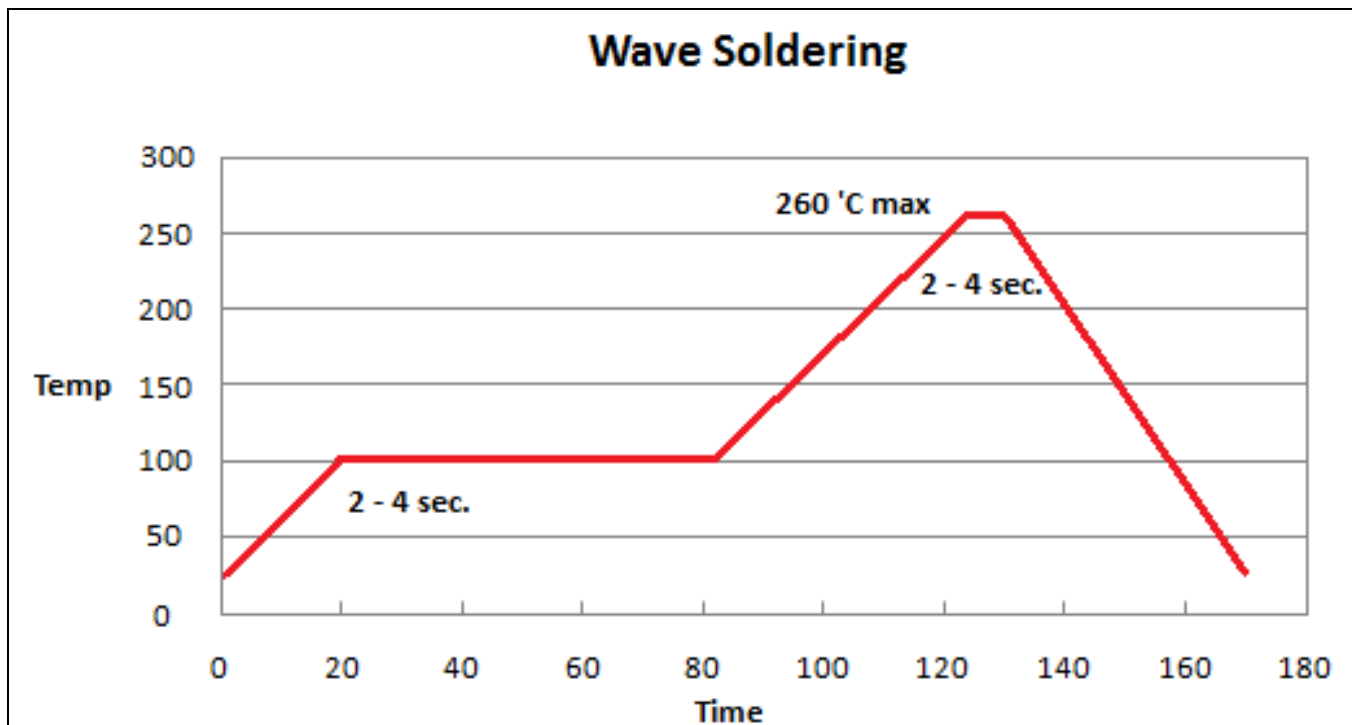


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## Soldering Profile

Method	Lead Frame Type / Holder Type
Hand Soldering	<ol style="list-style-type: none"> <li>1. Temperature at tip of iron: 400° C MAX (30W MAX).</li> <li>2. Soldering time: 3 seconds MAX</li> <li>3. Distance: 5mm MIN (from solder joint to case)</li> </ol>
DIP Soldering	<ol style="list-style-type: none"> <li>1. Preheat temperature: 100° C MAX, 60 seconds MAX</li> <li>2. Bath temp: 260° C MAX</li> <li>3. Bath time: 5 seconds MAX</li> <li>4. Distance: 3 mm MIN (from solder joint to case).</li> </ol>
Reflow Soldering	NO

Compliant with the following condition:



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**Revision History**

Changes since last revision	Page	Version No.	Revision Date
Initial Release – XXXX		1.0	08-05-2009