

Harvatek International Infrared Through-Hole Lamp**HE3-245AC-XXXX**

Official Product	HE3-245AC-XXXX			Data Sheet No.
Customer Part No.	*****			HE3-245AC-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.

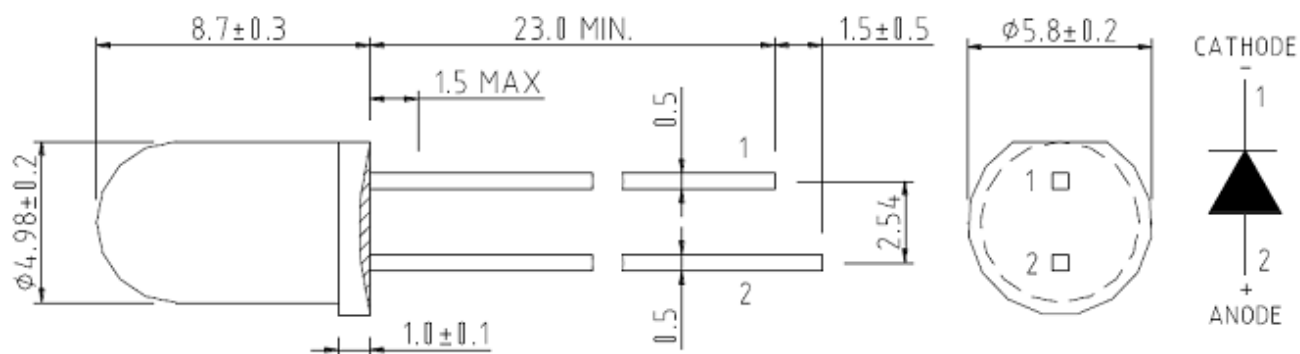
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Orderable Information

H E 3 - 2 4 5 A C - X X X X

Series Name	Description Code	Customer Code
HE3: Harvatek IR Lamp, 940 nm	245AC: 5mm with 45 degree viewing angle	XXXX Customer Product Code

Dimensional Drawing:



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Absolute Maximum Rating (@ 25°C)

Parameter	Symbol	Spec	Unit
Power Dissipation	P_D	170	mW
Reverse Voltage	V_R	5	V
Forward Current	I_F	100	mA
Reverse Current	I_R	10	μA
Pulse Forward Current	I_{FP}	1	A
Operating Temperature Range	T_{OPR}	-40 to +85	° C
Storage Temperature Range	T_{STG}	-40 to +100	° C

* Lead Soldering Temperature (3mm 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	14.0	30.0	—	mW/sr	$I_F = 50 \text{ mA}$
Forward Voltage	V_F	—	1.35	1.70	V	$I_F = 100 \text{ mA}$
Peak Wavelength	λ_p	—	940	—	nm	$I_F = 50 \text{ mA}$
Spectral Bandwidth @ 50%	$\Delta\lambda$	—	50	—	nm	$I_F = 50 \text{ mA}$
Viewing Angle	$2\theta_{1/2}$	—	45	—	degrees	$I_F = 50 \text{ mA}$

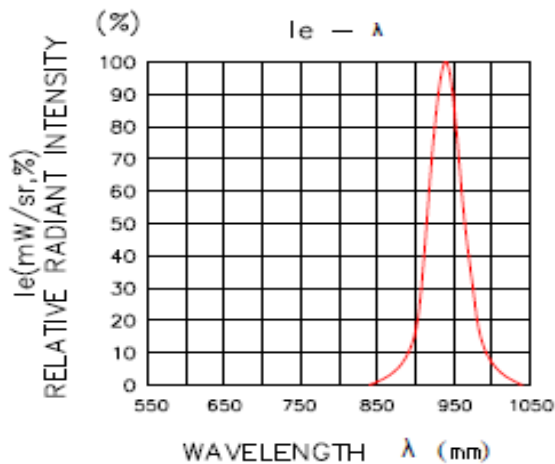
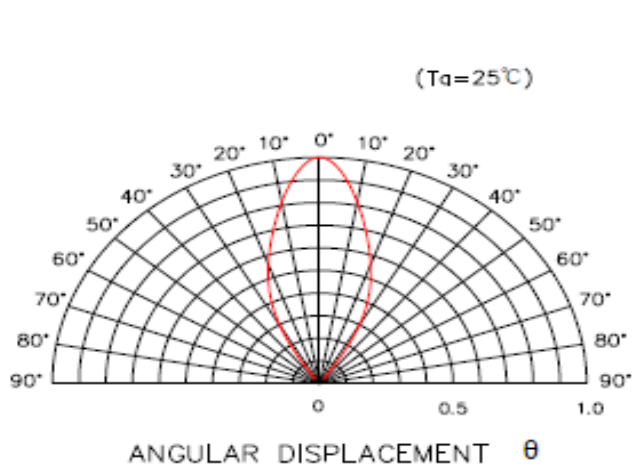
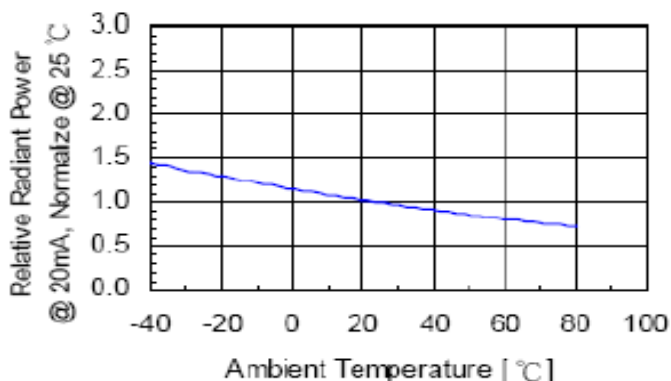
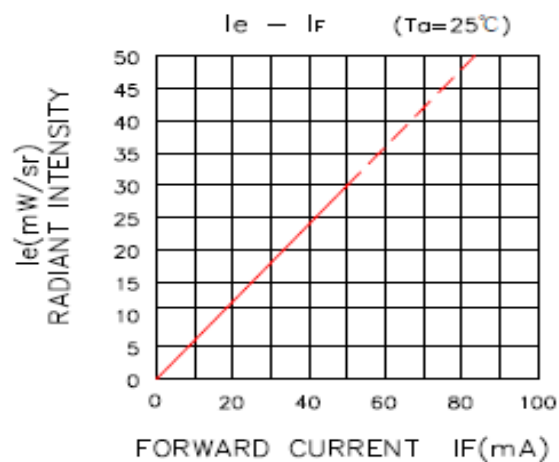
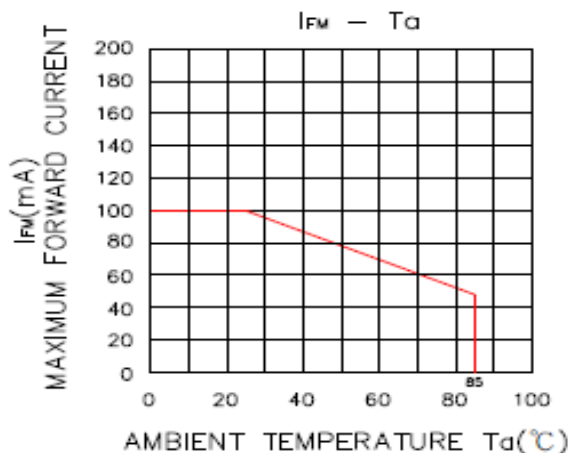
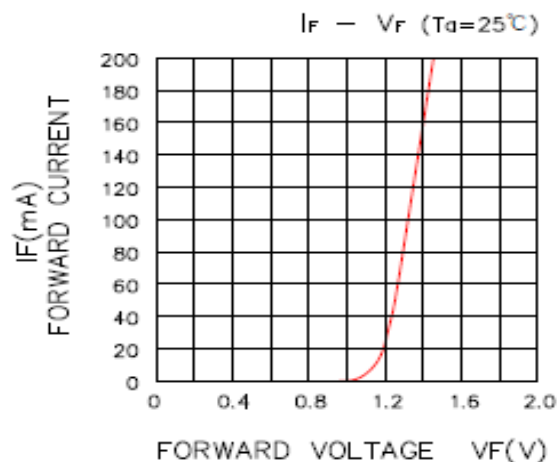
Radiant Intensity Measurement Tolerance = $\pm 15\%$

Forward Voltage Measurement Tolerance = $\pm 0.05V$

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

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Characteristic Curves

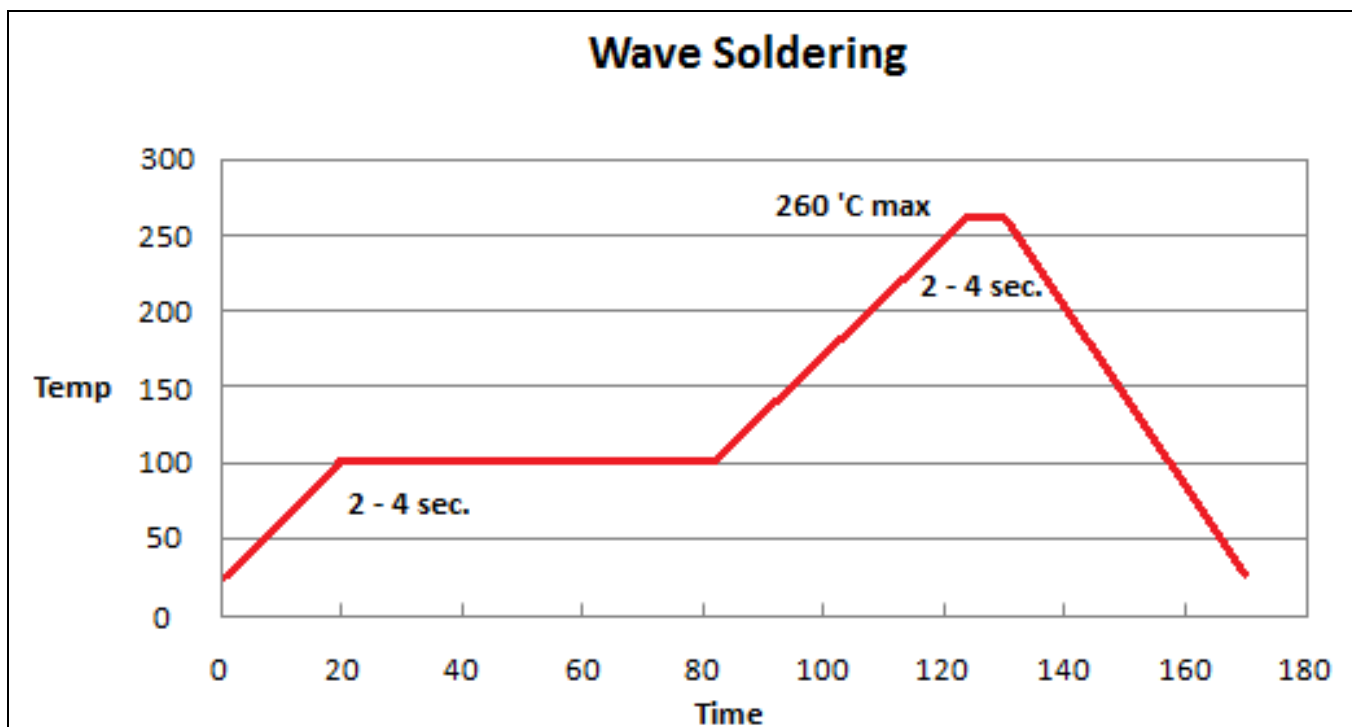


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Soldering Profile

Method	Lead Frame Type / Holder Type
Hand Soldering	<ol style="list-style-type: none"> 1. Temperature at tip of iron: 400° C MAX (30W MAX). 2. Soldering time: 3 seconds MAX 3. Distance: 5mm MIN (from solder joint to case)
DIP Soldering	<ol style="list-style-type: none"> 1. Preheat temperature: 100° C MAX, 60 seconds MAX 2. Bath temp: 260° C MAX 3. Bath time: 5 seconds MAX 4. Distance: 3 mm MIN (from solder joint to case).
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

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