

**Harvatek International 3.0mm ROUND LED LAMP  
HV-7Y36WCXL**

Official Product	HV-7Y36WCXL	Customer Part No.	Data Sheet No.
	*****	*****	HV-7Y36WCXL
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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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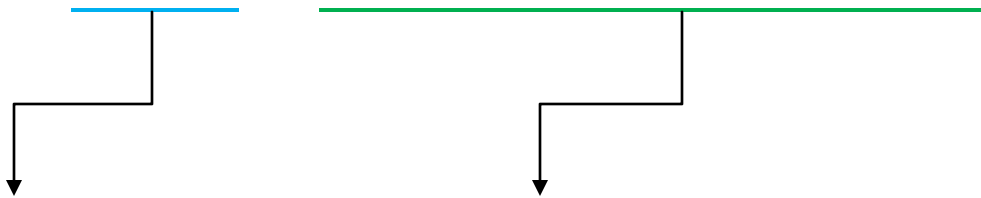
## Compliance and Certification

ISO9002, QS9000 and ISO14001 Certified  
RoHS Compliant



## Orderable Information

H V - 7 Y 3 6 W C X L

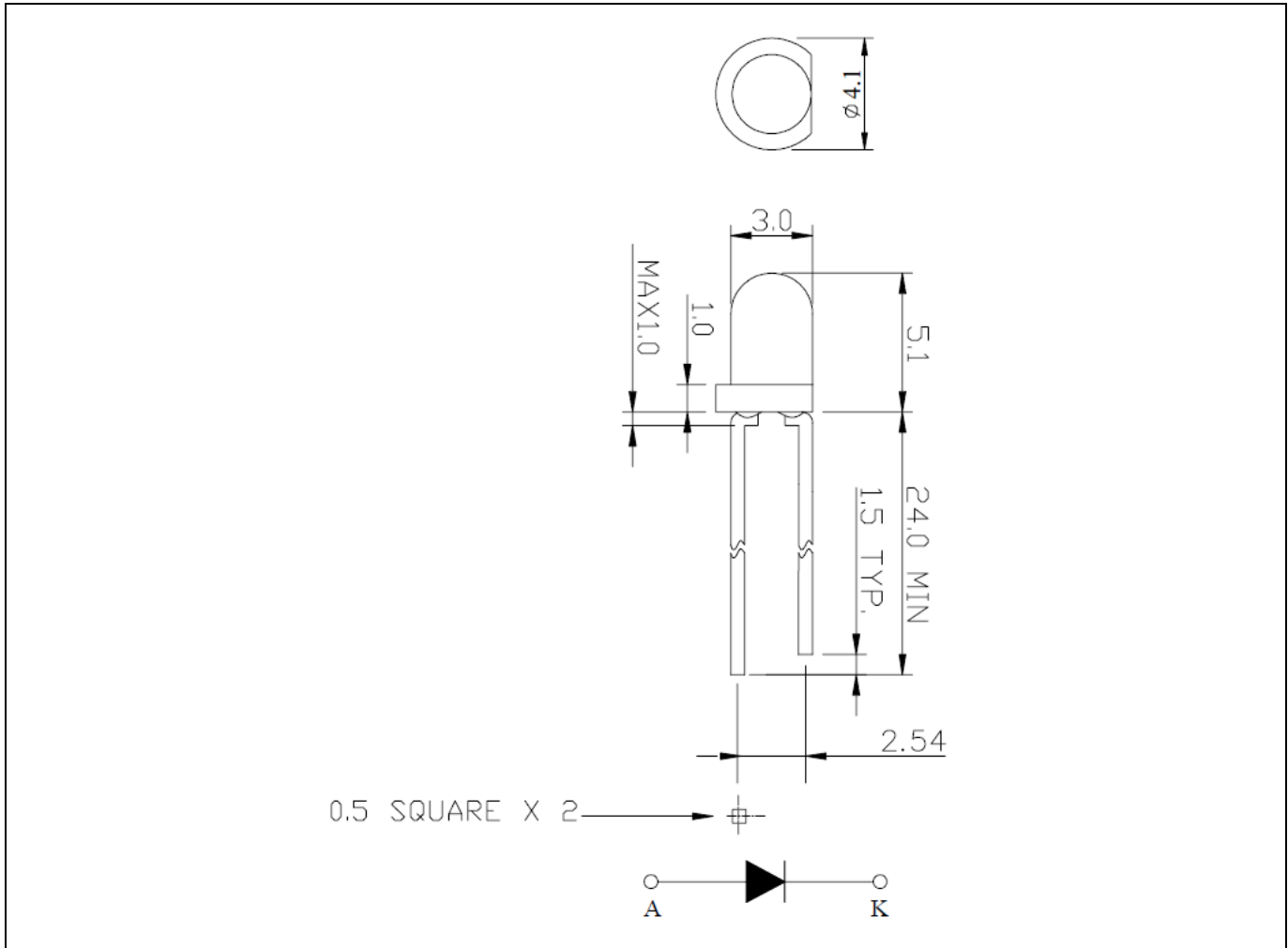


Series Name	Color Code	Remark
HV= Harvatek 3.0mm ROUND LED LAMP	7Y = 3.0mm Round Lamp,5.1mm Lens. GaAsP/GaP 585nm Yellow chip.  36 = Viewing angle 36 deg. WC = Water Clear. XL = HARVATEK part no.	

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## Features:

- Stable Color
- Popular 3.0mm through hole package, 5.1mm lens height.
- Water Clear lens



### Notes:

1. All dimensions are in mm.
2. Tolerance is  $\pm 0.25$  mm unless otherwise noted.

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## Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Power Dissipation	P <sub>D</sub>	78	mW
Reverse Voltage	V <sub>R</sub>	5	V
D.C. Forward Current	I <sub>f</sub>	30	mA
Reverse (Leakage) Current	I <sub>r</sub>	100	μA
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	I <sub>f</sub> (Peak)	100	mA
Operating Temperature Range	T <sub>opr.</sub>	-25 to +85	°C
Storage Temperature Range	T <sub>stg.</sub>	-40 to +100	°C
Soldering Temperature(1.6mm from body)	T <sub>sol.</sub>	Dip Soldering : 260°C for 5 sec. Hand Soldering : 350°C for 3 sec.	

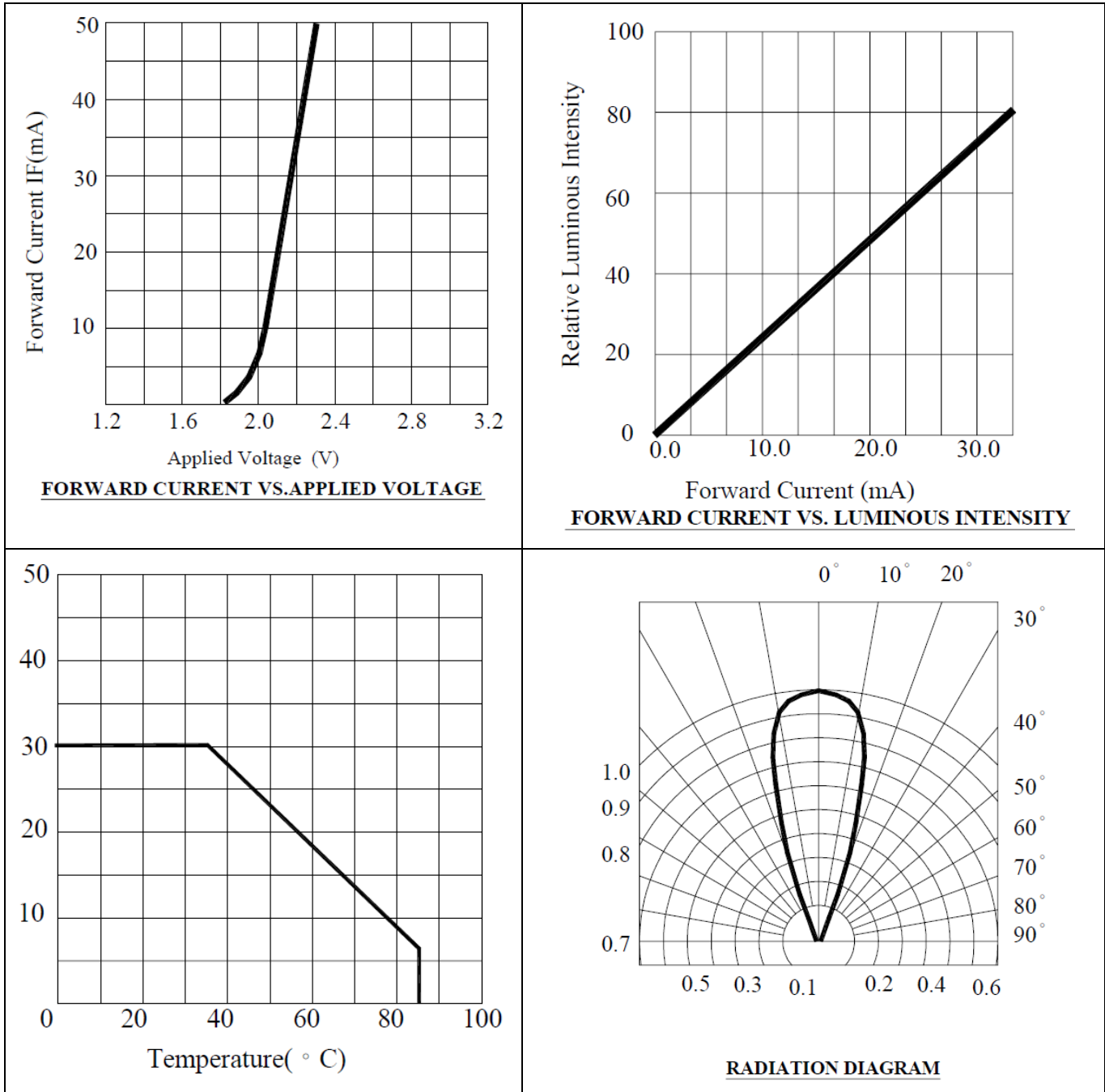
## Electrical and Optical Characteristic

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	I <sub>v</sub>	I <sub>f</sub> =20mA	20.0	50.0		mcd
Forward Voltage	V <sub>f</sub>	I <sub>f</sub> =20mA		2.1	2.6	V
Peak Wavelength	λ <sub>P</sub>	I <sub>f</sub> =20mA		585		nm
Dominant Wavelength	λ <sub>D</sub>	I <sub>f</sub> =20mA		590		nm
Reverse (Leakage) Current	I <sub>r</sub>	V <sub>r</sub> =5V			100	μA
Viewing Angle	2θ 1/2	I <sub>f</sub> =20mA		36		deg
Spectrum Line Halfwidth	Δλ	I <sub>f</sub> =20mA		35		nm

NOTE: THE DATAS TESTED BY IS TESTER

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**Typical Electrical/Optical Characteristic Curves**



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## Precautions :

### TAKE NOTE OF THE FOLLOWING IN USE OF LED

#### 1. Temperature in use

Since the light generated inside the LED needs to be emitted to outside efficiently, a resin with high light transparency is used; therefore, additives to improve the heat resistance or moisture resistance (silica gel , etc) which are used for semiconductor products such as transistors cannot be added to the resin.

Consequently, the heat resistant ability of the resin used for LED is usually low; therefore, please be careful on the following during use.

Avoid applying external force, stress, and excessive vibration to the resins and terminals at high temperature. The glass transition temperature of epoxy resin used for the LED is approximately 120-130°C.

At a temperature exceeding this limit, the coefficient of liner expansion of the resin doubles or more compared to that at normal temperature and the resin is softened.

If external force or stress is applied at that time, it may cause a wire rupture.

#### 2. Soldering

Please be careful on the following at soldering.

After soldering, avoided applying external force, stress, and excessive vibration until the products go to cooling process (normal temperature), <Same for products with terminal leads>

##### (1) Soldering measurements:

Distance between melted solder side to bottom of resin shall be 1.6mm or longer.

##### (2) Dip soldering :

Pre-heat: 90°C max. (Backside of PCB), Within 60 seconds.

Solder bath: 260±5°C (Solder temperature), Within 5 seconds.

##### (3) Hand soldering: 350°C max. (Temperature of soldering iron tip), Within 3 seconds.

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### 3. Insertion

Pitch of the LED leads and pitch of mounting holes need to be same.

### 4. Others

Since the heat resistant ability of the LED resin is low, SMD components are used on the same PCB, please mount the LED after adhesive baking process for SMD components. In case adhesive baking is done after LED lamp insertion due to a production process reason, make sure not to apply external force, stress, and excessive vibration to the LED and follow the conditions below.

Baking temperature: 120°C max. Baking time: Within 60 seconds.

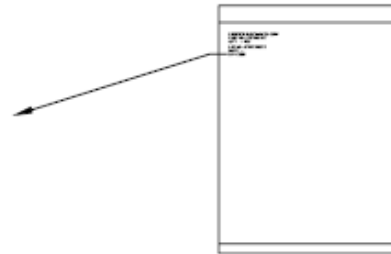
If soldering is done sequentially after the adhesive baking, please perform the soldering after cooling down the LED to normal temperature.

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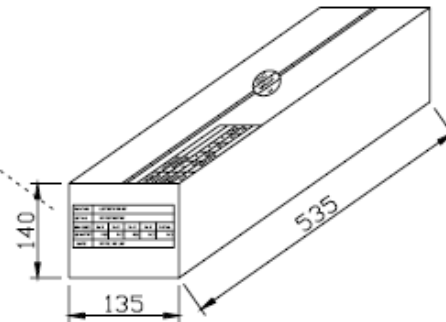
PLASTIC PACKAGE  
QUANTITY: 1000 PCS

HARVATEK CORP.					
PART NO : XXXX-XX					
Q'TY : PCS					
LOT NO :XXXXXXXXXX					
DATE :					
BIN CODE:					



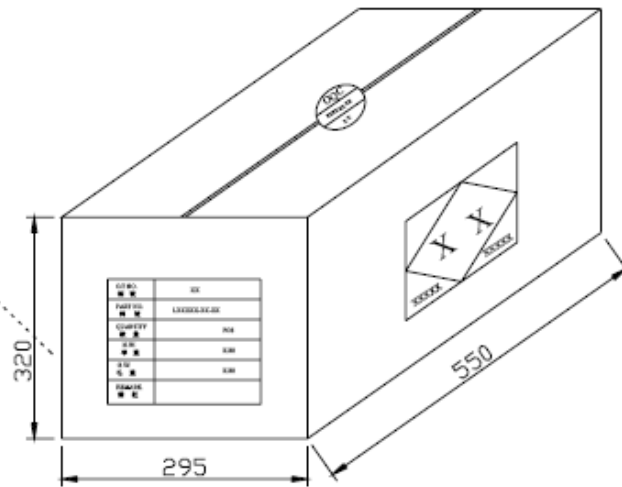
INNER BOX  
QUANTITY: 20 PACKETS  
TOTAL: 20,000 PCS

PART NO.	XXXXX-XX-XX				
LOT NO.	XXXXXXXXXX				
BIN CODE	XxX	XxX	XxX	XxX	TOTAL
QUANTITY	PCS	PCS	PCS	PCS	PCS
DATE	XXXX . XX . XX				



OUTER CARTON  
QUANTITY: 4 BOX  
TOTAL: 80,000 PCS

C/T NO. 箱號	XX
PART NO. 料號	XXXXX-XX-XX
QUANTITY 數量	PCS
N.W. 淨重	KGS
G.W. 毛重	KGS
REMARK 備註	



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## Revision History

Revision	Page	Version No.	Revision Date
Initial Release		1.0	09-25-2015

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