

**Harvatek 5.0mm Round LED LAMP****HV-62R3303D-TR1**

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Official Product	HV-62R3303D-TR1 *****	Customer Part No. *****	Data Sheet No. CDAE-010-678
Specifications are subject to change without notice. Data and drawings herein are copyrighted.	Oct. 31 2019	Version of 1.0	Page 1/12

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1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
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

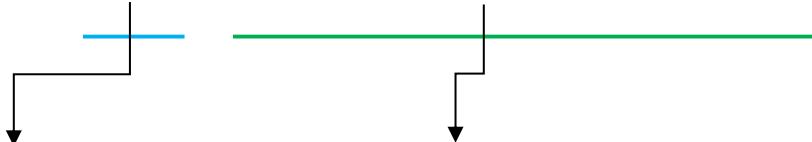
ISO9002, QS9000 and ISO14001 Certified

RoHS Compliant



## Orderable Information

**HV - 62 R 3303D - TR1**

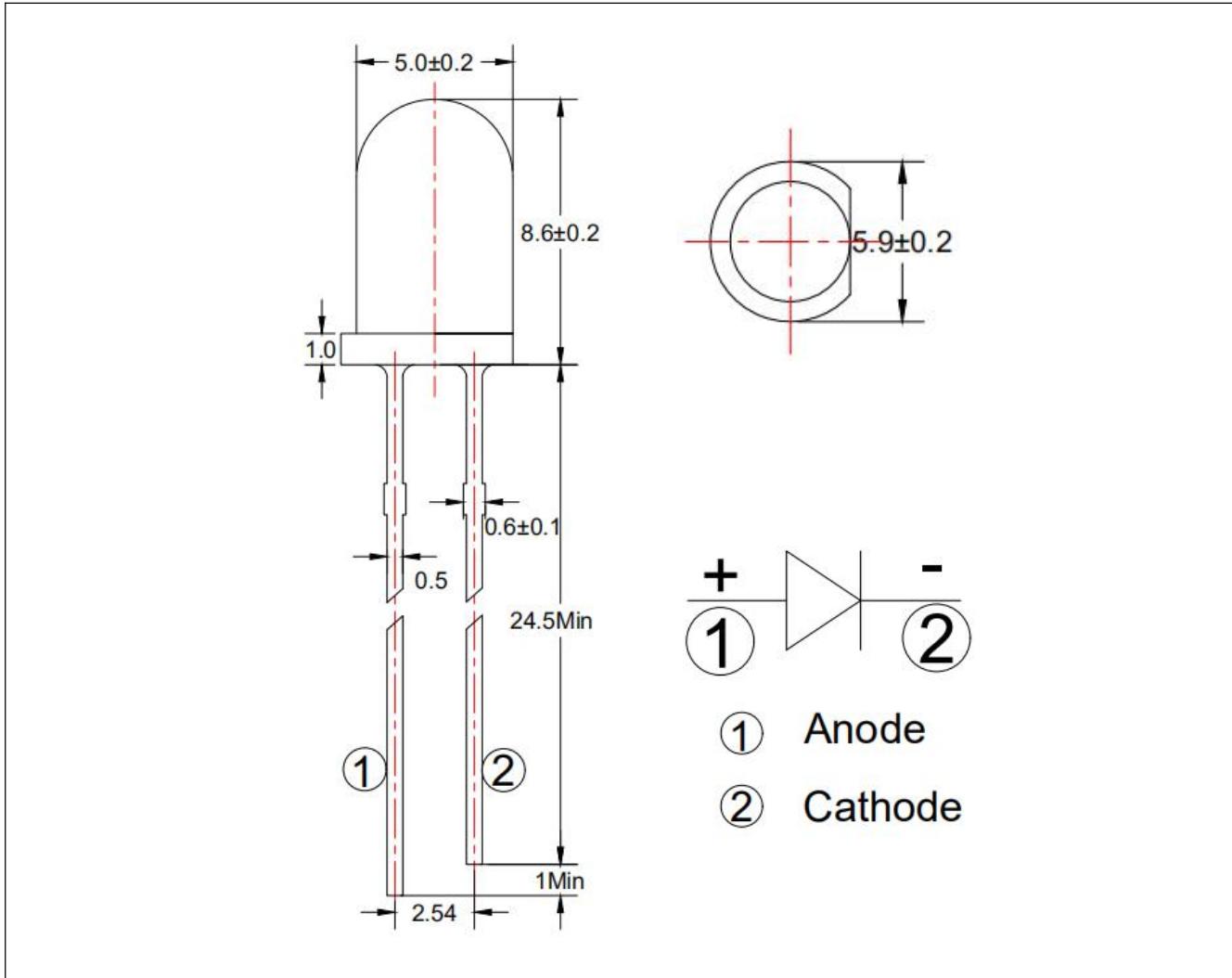


Series Name	Color Code	Remark
HV : HARVATEK	62R3303: 5.0mm Round LED LAMP,8.7mm Lens. AlGaInP 622nm Red chip D : Red Diffused TR1: HARVATEK Part No.	

## Features:

- Stable Color
- Popular 5.0mm through hole package, 8.7mm lens height.
- Red Diffused lens

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**Package Dimensions:****Notes:**

1. All dimensions are millimeters.
2. Tolerance is +/-0.25mm unless otherwise noted.
3. Specifications are subject to change without notice.

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**Absolute Maximum Ratings at Ta=25°C**

Parameter	Symbol	Rating	Unit
Forward Current	I <sub>F</sub>	30	mA
Operating Temperature	T <sub>opr</sub>	-40to+85	°C
Storage Temperature	T <sub>stg</sub>	-40to+100	°C
Soldering Temperature*1	T <sub>sol</sub>	260±5	°C
Power Dissipation	P <sub>d</sub>	75	mW
Reverse Voltage	V <sub>R</sub>	5	V
Peak Forward Current*2	I <sub>FP</sub>	0.1	A

\*1:Soldering time  $\leq$  5 seconds. \*2 Pulse Width  $\leq$  100  $\mu$  s and Duty  $\leq$  1%.

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**Electrical and Optical Characteristic**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20$ mA	/	2.0	2.4	V
Reverse Current	$I_R$	$V_R= 5$ V	/	/	10	$\mu$ A
Luminous Intensity	$I_V$	$I_F=20$ mA	/	80	/	mcd
Viewing Angle	$\theta_{1/2}$	$I_F=20$ mA	/	30	/	deg
Dominant Wavelength	$\lambda_d$	$I_F=20$ mA	618	623	/	nm
Peak Wavelength	$\lambda_p$	$I_F=20$ mA	620	625	/	nm
Spectrum Radiation Bandwidth	$\Delta\lambda$	$I_F=20$ mA	/	45	/	nm

Notes:  $\theta_{1/2}$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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**Specifications for Bin Grading:**

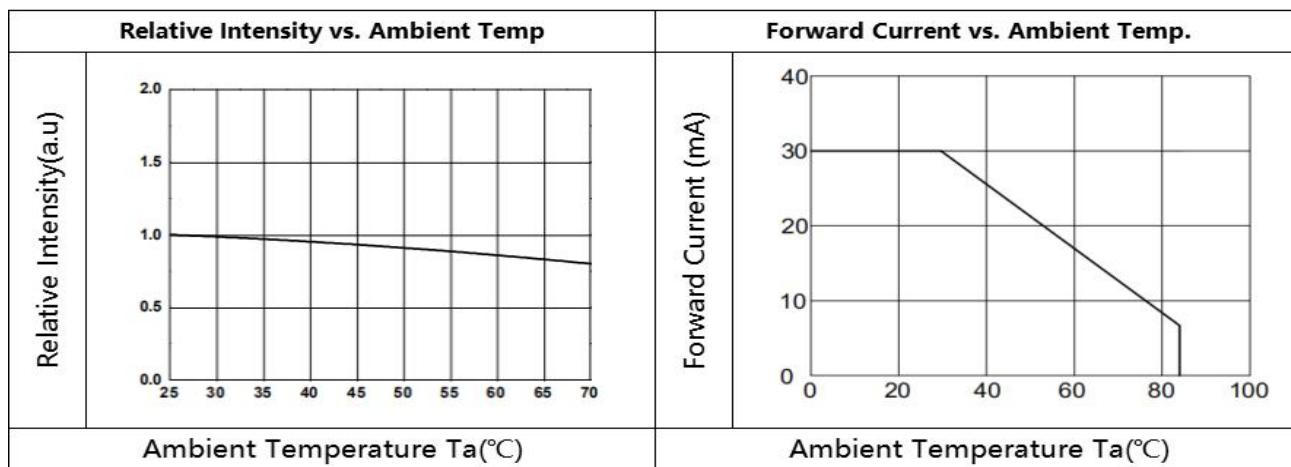
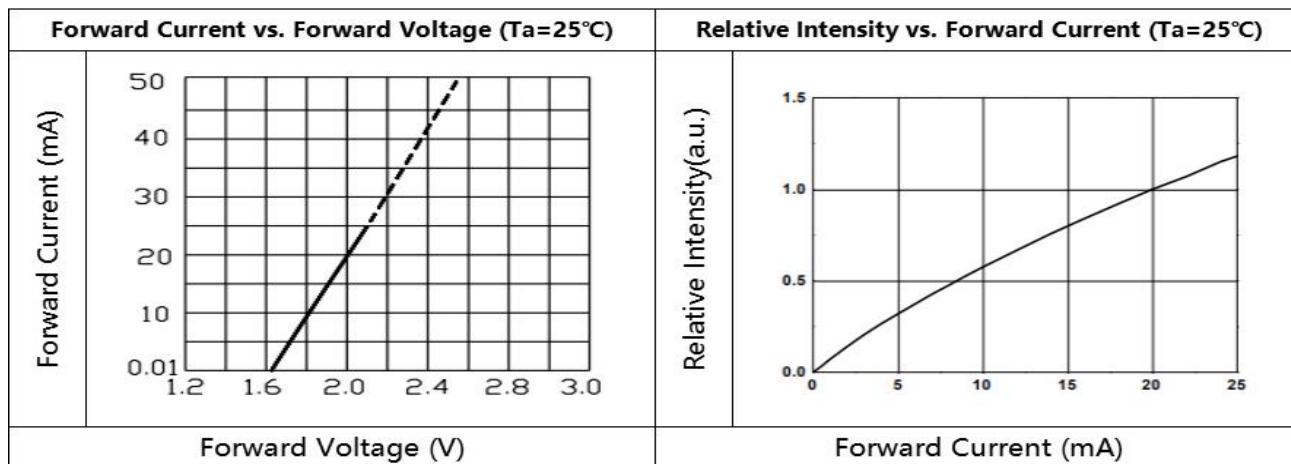
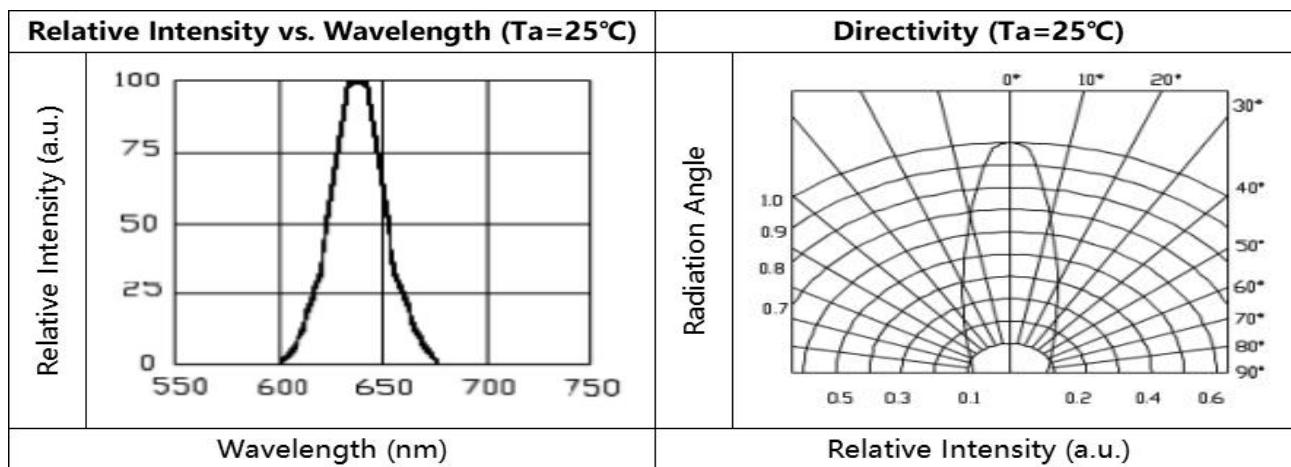
I <sub>v</sub> (mcd)		
Grade	Min.	Max.
L	10	20
M	16	32
N	25	50
P	40	80
Q	63	125
R	100	200
S	160	320
T	250	500

λ d (nm)		
Grade	Min.	Max.
01	618	621
1	620	623
2	622	625
3	624	627
4	626	629
5	628	631

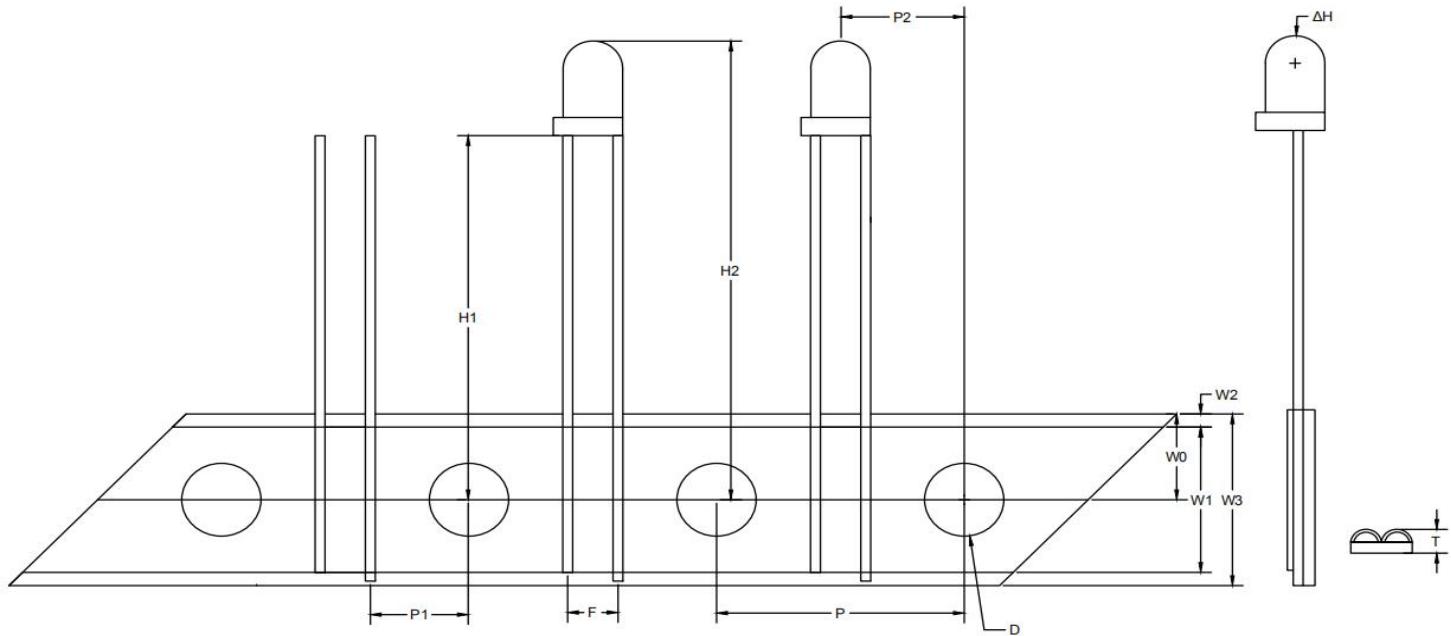
**Notes:**

- 1.Luminous intensity: +/-15%.
- 2.Wavelength: +/-1nm.

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**Typical Electro-Optical Characteristics Curves**

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**Carrier Tape Dimensions:****Notes:**

Lead spacing is measured where the lead emerge from the package

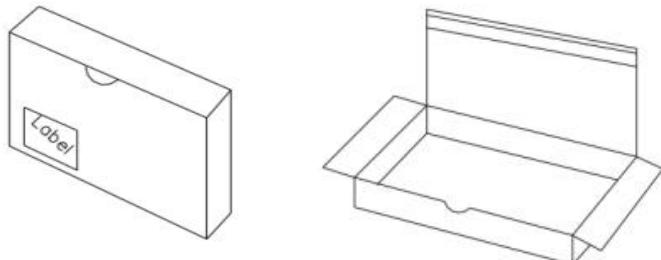
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**Taping Sizes**

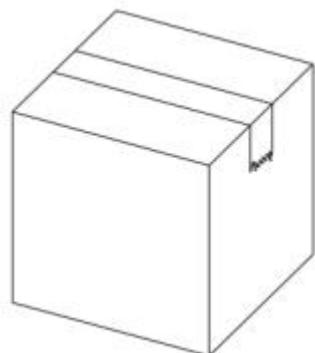
Symbol Items	Symbol	Specifications		
		Avg.		Tolerance
		mm	Inch	(mm)
Tape Feed Hole Diameter	D	4.0	0.157	±0.2
Component Lead Pitch	F	2.54	0.100	+0.8/-0.2
Front-to-Read Deflectio	Δ H	2°	0.078	±5°
Feed Hole to Button of Component	H1	18.5	0.730	±1.0
Feed Hole to Overall Component Height	H2	27.5	1.262	±1.0
Feed Hole Pitch	P	12.5	0.500	±0.3
Lead Location	P1	4.5	0.200	±0.7
Center of Component Location	P2	5.0	0.250	±1.2
Overall Taped Package Thickness	T	1.42	0.056	MAX
Feed Hole Location	W0	8.5	0.354	±0.5
Adhesive Tape Width	W1	13.5	0.512	±0.5
Adhesive Tape Position	W2	2.0	0.079	MAX
Tape Width	W3	18.0	0.709	±0.75

Note: Tolerances unless mentioned ±0.1mm. Unit = mm

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**Packing Specification:**

2500PCS/In-Carton



25000PCS/Out-Carton



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**Revision History**

<b>Revision</b>	<b>Page</b>	<b>Version No.</b>	<b>Revision Date</b>
Initial Release		1.0	10-31-2019

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