

**Harvatek 4.3x3.3x3.6mm Lead Frame Type SMD LED**  
**HVD-L433336IRWCH-TR1**

Official Product	HVD-L433336IRWCH-TR1	Customer Part No.		Data Sheet No.
	*****	*****		HVD-L433336IRWCH-TR1
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Nov. 11 2019	Version of 1.0	Page 1/10

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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

**HV D - L 43 33 3 6 I R W C H -TR1**

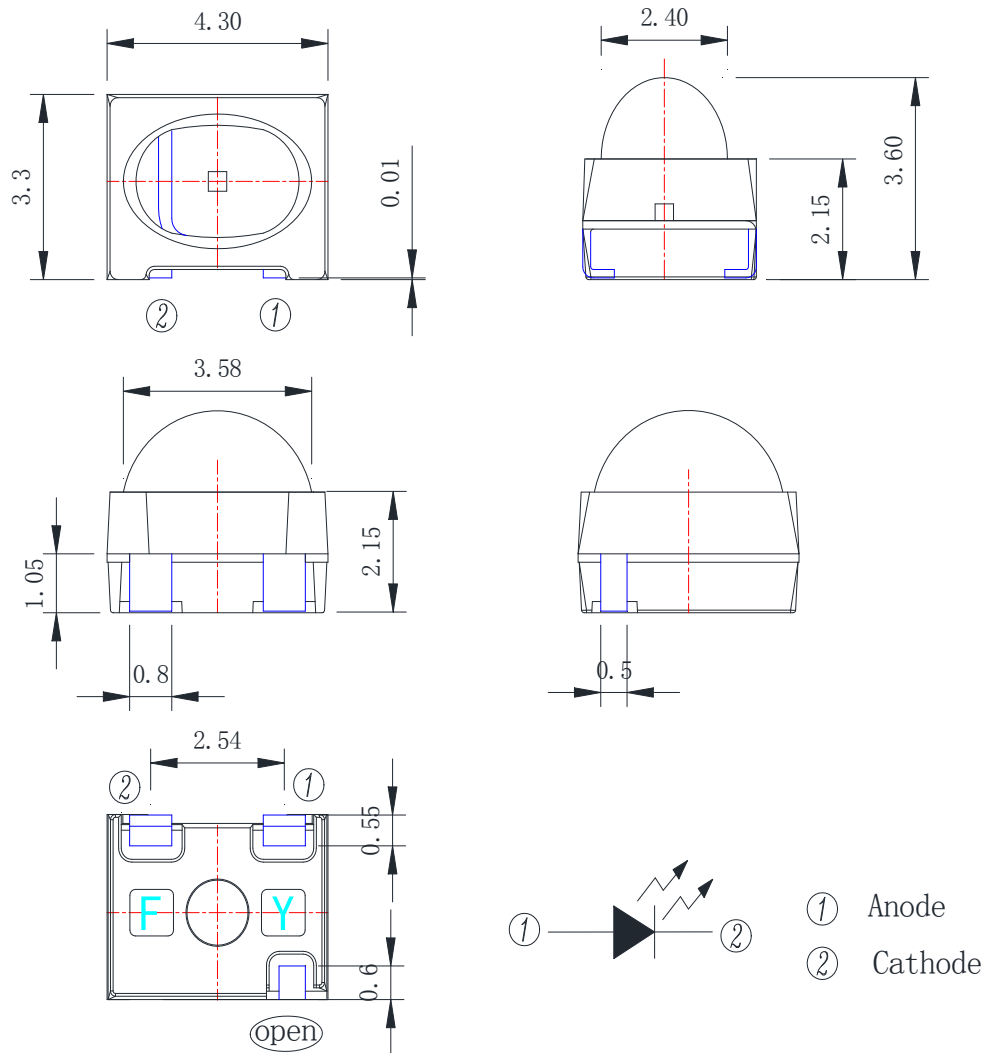
Series Name	Color Code	Remark
HVD: HARVATEK	L433336 :4.3x3.3x3.6mm Lead Frame Type SMD. IR:940nm InGaN IR Chip. WC : Water Clear. H : HARVATEK Part No. TR1:HARVATEK Part No.	

## Features:

- Stable Color
- Popular 4.3x3.3x3.6mm SMD Type package.
- Water Clear 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>	100	mA
Operating Temperature	T <sub>opr</sub>	-25to+85	°C
Storage Temperature	T <sub>stg</sub>	-25to+85	°C
Soldering Temperature*1	T <sub>sol</sub>	260	°C
Power Dissipation	P <sub>d</sub>	150	mW
Reverse Voltage	V <sub>R</sub>	5	V
Peak Forward Current*2	I <sub>FP</sub>	0.5	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	$V_F$	$I_F=20\text{ mA}$	/	1.3	1.6	V
Reverse Current	$I_R$	$V_R=5\text{ V}$	/	/	10	$\mu\text{A}$
Radiant Intensity	$I_e$	$I_F=20\text{mA}$	/	17	/	mW/sr
		$I_F=100\text{mA}$	/	75	/	
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{ mA}$	/	70	/	deg
			/	16	/	
Peak Wavelength	$\lambda_p$	$I_F=20\text{ mA}$	930	940	/	nm
Spectrum Radiation Bandwidth	$\Delta\lambda$	$I_F=20\text{ mA}$	/	45	/	nm

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

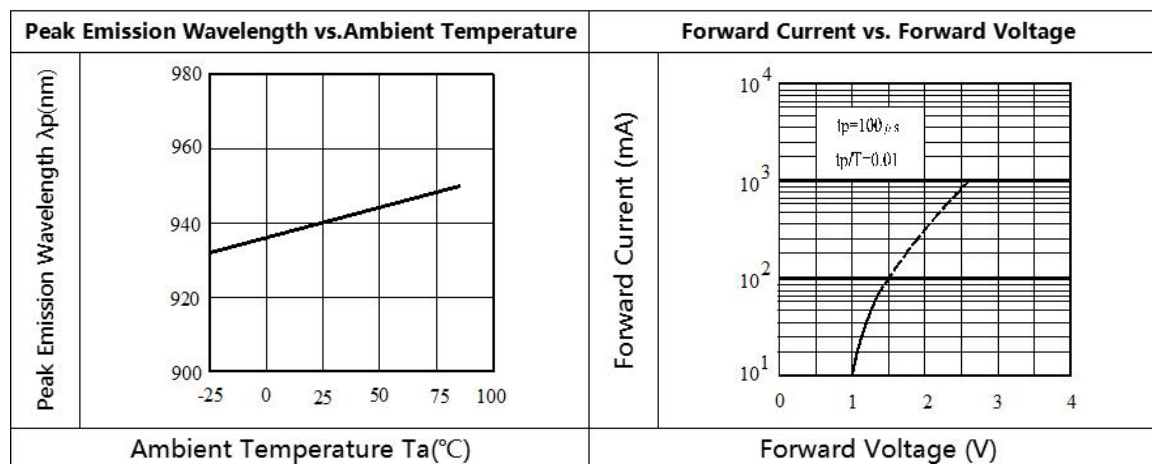
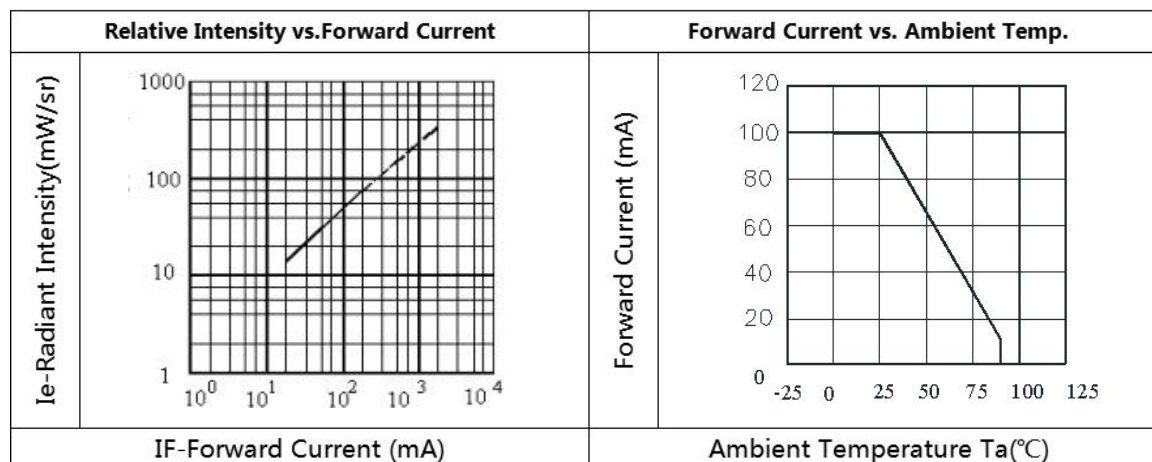
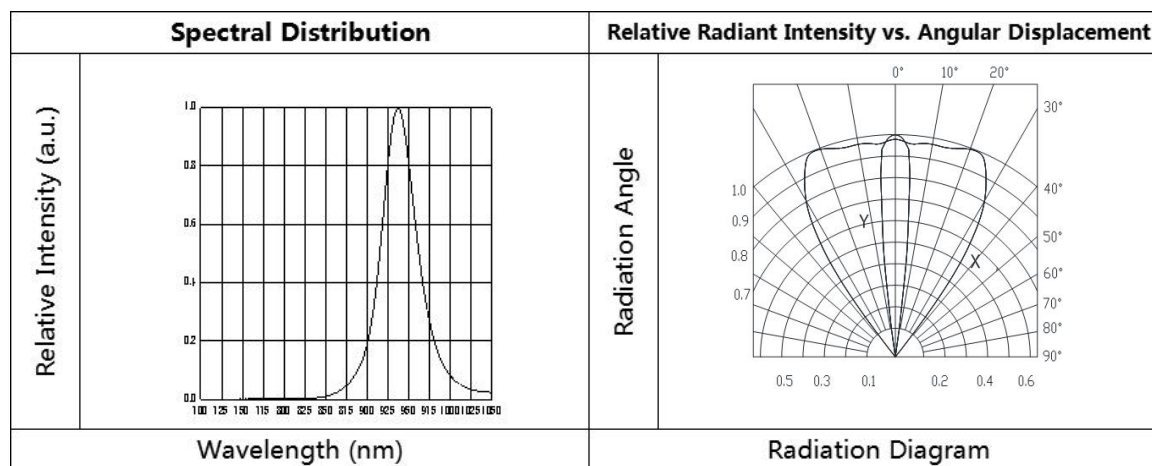
## Specifications for Bin Grading:

$I_e$ (mW/sr)		
Grade	Min.	Max.
N-5	14.4	25.2
P-6	16.8	28.8
Q-7	19.2	32.4
R-8	21.6	36.0

Notes: Radiant Intensity:  $\pm 15\%$ .

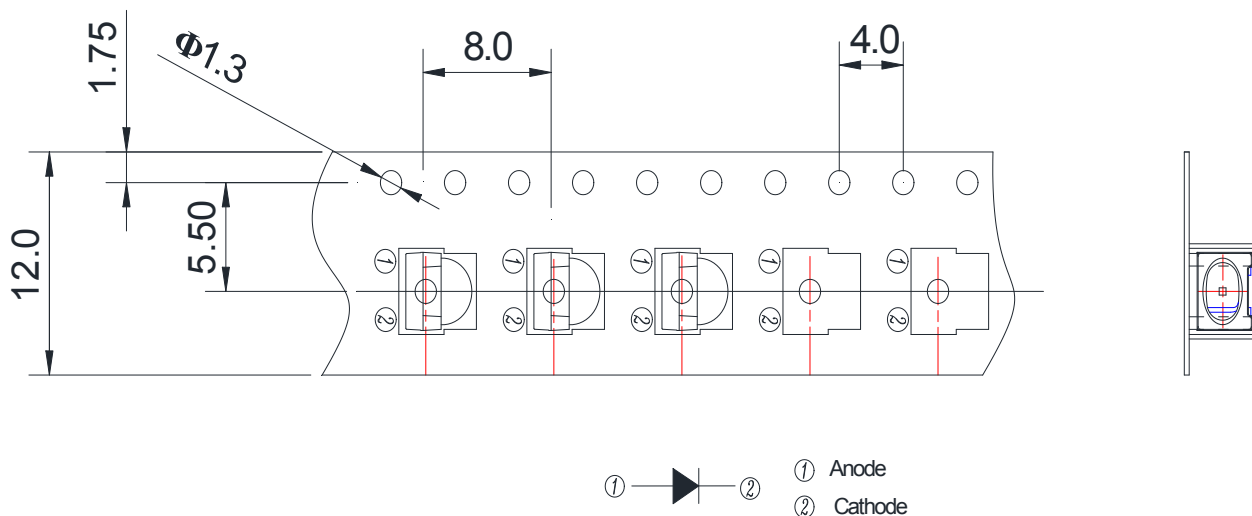
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## Typical Electro-Optical Characteristics Curves



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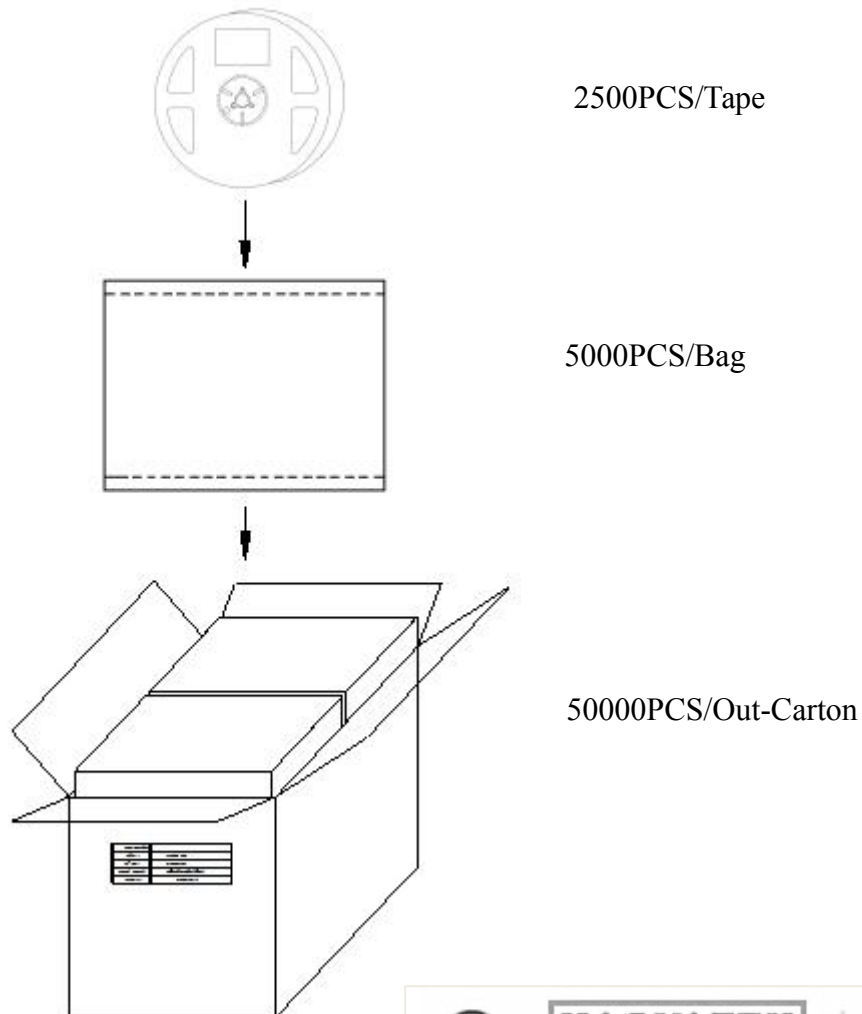
## Taping Dimension



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## Packing Specification:



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**Revision History**

Revision	Page	Version No.	Revision Date
Initial Release		1.0	11-11-2019

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