

**Harvatek 4.2x3.3x4.1mm Lead Frame Type SMD LED
HVD-L423341PDBDH-TR1**

Official Product	HVD-L423341PDBDH-TR1	Customer Part No.		Data Sheet No.
	*****	*****		HVD-L423341PDBDH-TR1
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Sep.12 2019	Version of 1.0	Page 1/10

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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

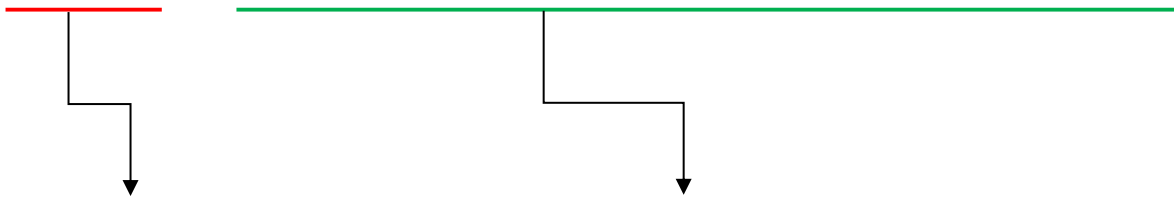
ISO9002, QS9000 and ISO14001 Certified

RoHS Compliant



Orderable Information

HV D - L 42 33 4 1 P D B D H -TR1



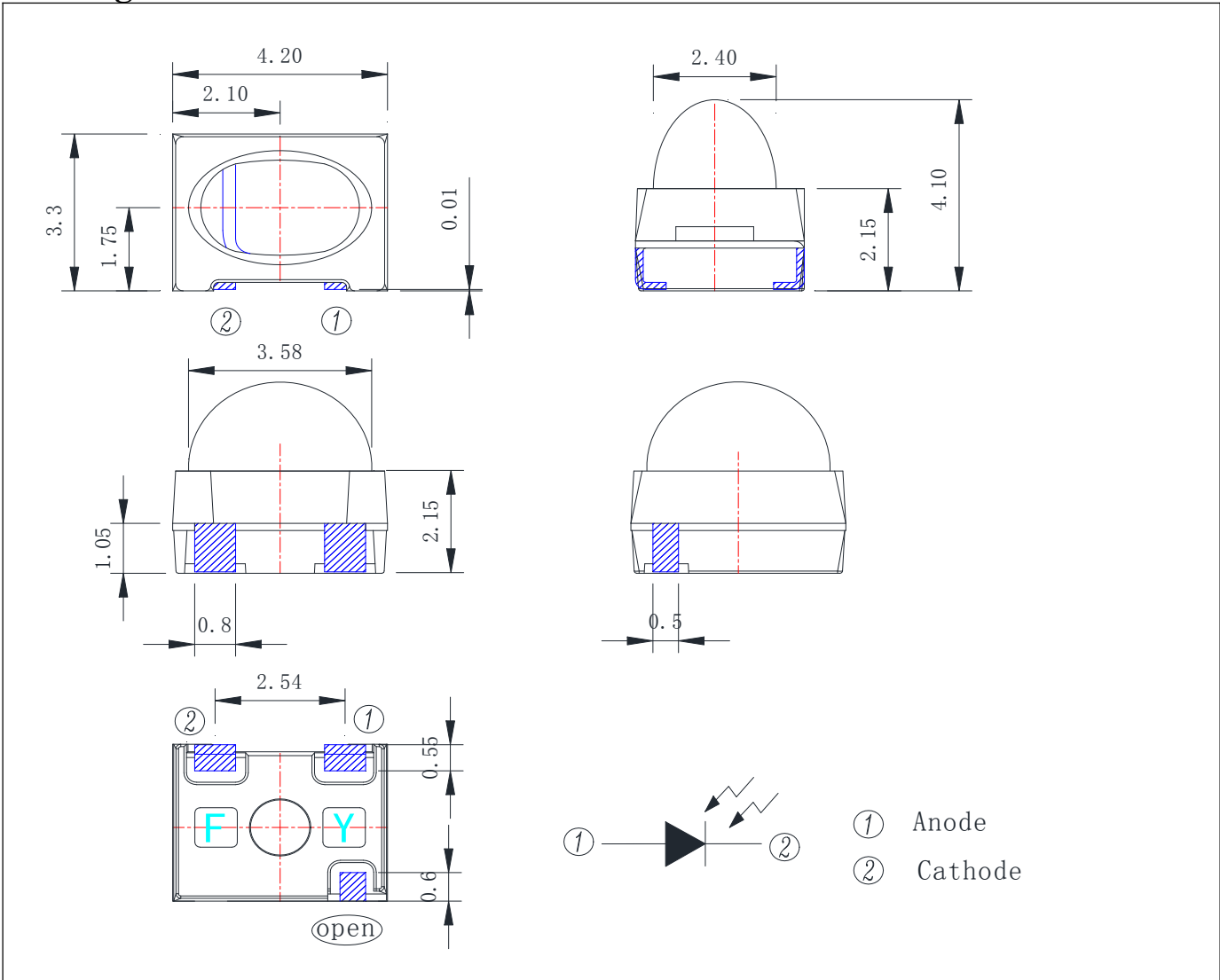
Series Name	Color Code	Remark
HVD: HARVATEK	L423341 :4.2x3.3x4.1mm Lead Frame Type SMD. PD :940nm PD Chip. BD :Black Diffused.. H : HARVATEK Part No. TR1: HARVATEK Part No.	

Features:

- Stable Color
- Popular 4.2x3.3x4.1mm SMD Type package.
- Black Diffused. Lens.

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		Page 3/10	

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
Reverse Voltage	V _R	32	V
Operating Temperature	T _{opr}	-25to+85	°C
Storage Temperature	T _{stg}	-25to+85	°C
Soldering Temperature*1	T _{sol}	260±5	°C
Power Dissipation	P _d	150	mW

*1:Soldering time ≅ 5 seconds.

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Electrical and Optical Characteristic

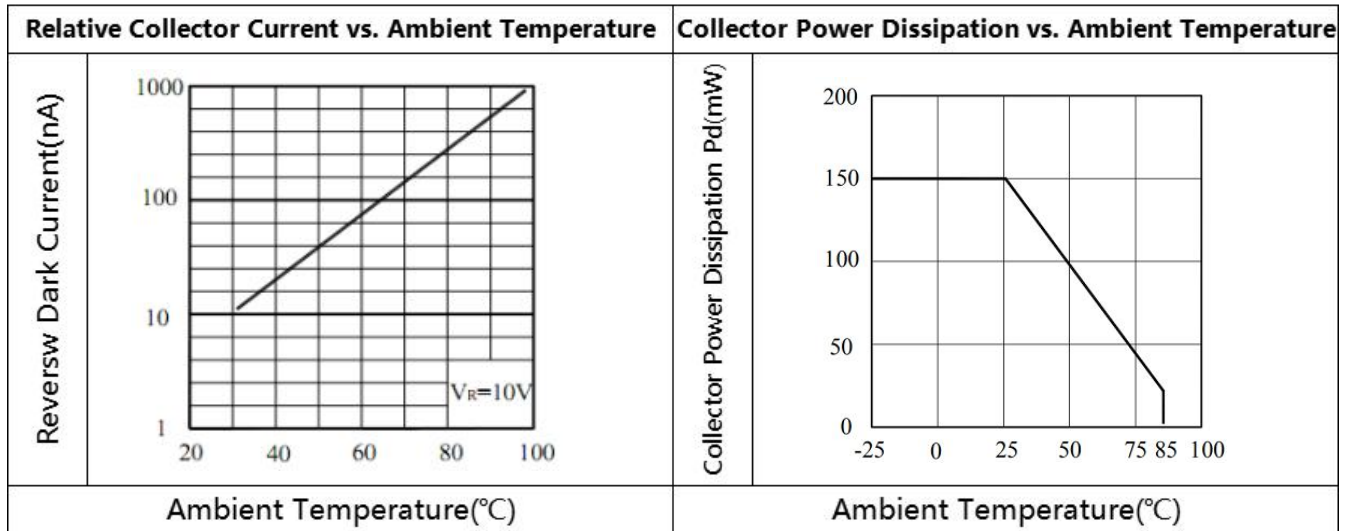
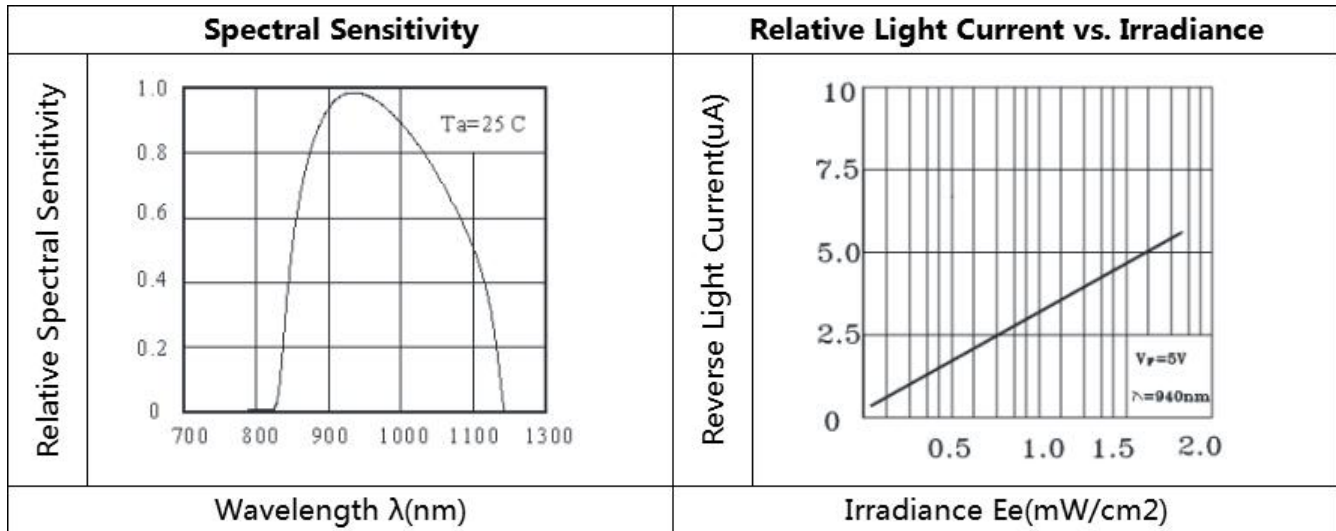
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	BV_R	$E_e=0, I_R=100\mu A$	32	/	/	V
Open Circuit Voltage	V_{oc}	$E_e=5\text{mw}/\text{cm}^2$ $\lambda_p=940\text{nm}$	/	0.44	/	V
Dark Current	I_d	$E_e=0, V_R=10V$	/	/	100	nA
Reverse Light Current	I_L	$E_e=1\text{mw}/\text{cm}^2$ $\lambda_p=940\text{nm } V_R=5V$	/	3.1	/	μA
Total Capacitance	C_t	$E_e=0$ $V_R=5V \quad f=1\text{mHz}$	/	18	/	pF
Peak Wavelength	λ_p	$I_F=20 \text{ mA}$	/	940	/	nm
Rang of Spectral Bandwidth	$\lambda_{0.5}$	$I_F=20 \text{ mA}$	850	/	1100	nm
Rise Time	t_r	$V_{CE}=10V$ $R_L=100\Omega$	/	10	/	nS
Fall Time	t_f		/	10	/	nS

Specifications for Bin Grading:

$I_L (\mu A)$		
Grade	Min.	Max.
K-4	2.24	3.6
L-5	2.4	4.2

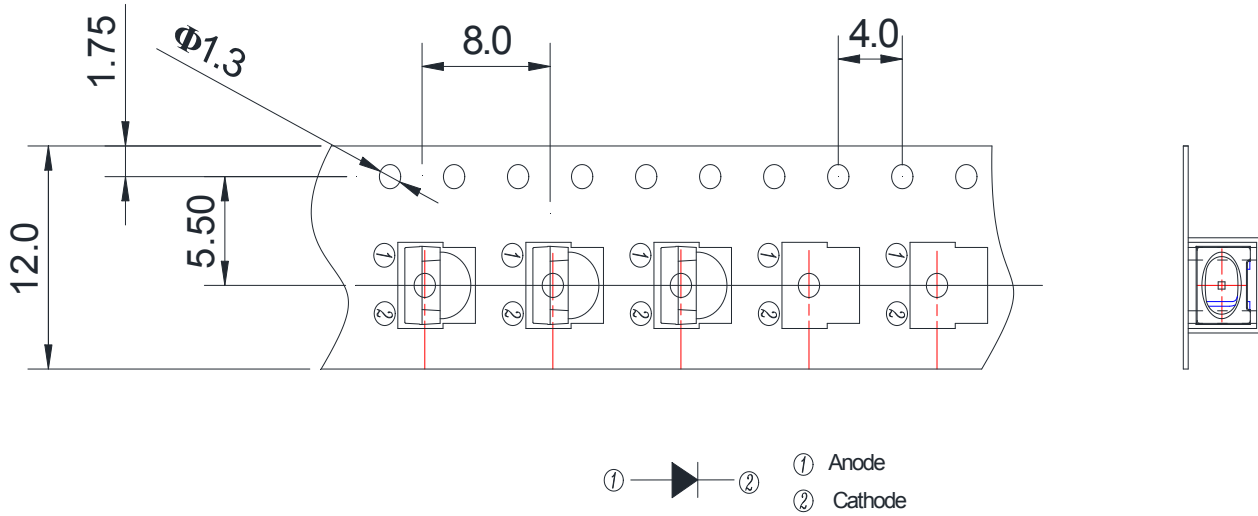
Official Product	HVD-L423341PDBDH-TR1	Customer Part No.		Data Sheet No.
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Typical Electro-Optical Characteristics Curves



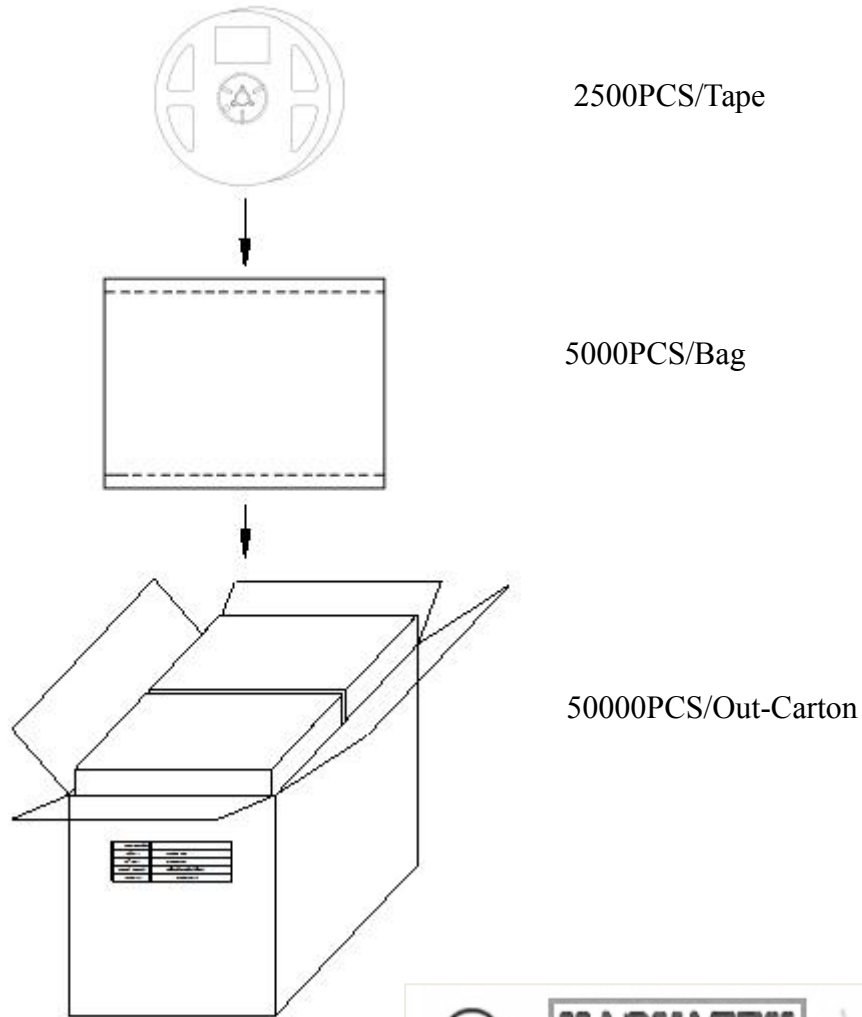
Official Product	HVD-L423341PDBDH-TR1	Customer Part No.	Data Sheet No.
	*****	*****	HVD-L423341PDBDH-TR1
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		Page 7/10	

Taping Dimension



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	*****	*****	HVD-L423341PDBDH-TR1
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Sep.12 2019	Version of 1.0
		Page 8/10	

Packing Specification:



Official Product	HVD-L423341PDBDH-TR1	Customer Part No.	Data Sheet No.
	*****	*****	HVD-L423341PDBDH-TR1
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Sep.12 2019	Version of 1.0
			Page 9/10

Revision History

Revision	Page	Version No.	Revision Date
Initial Release		1.0	09-12-2019

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	*****	*****	HVD-L423341PDBDH-TR1
Specifications are subject to change without notice. Data and drawings herein are copyrighted.	Sep.12 2019	Version of 1.0	Page 10/10