

# Harvatek International Bi-Color Rectangular lamp HVR-5X3XRA series

Official Product	HVR-5X3XRA	Customer Part No.		Data Sheet No.
	*********	*****	HVR-5X3XRA	
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Aug. 01, 2005	Version of 1.0	Page 1/8



#### **DISCLAIMER**

HARVATEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. HARVATEK does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

#### LIFE SUPPORT POLICY

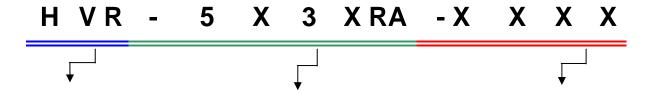
HARVATEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of the President of HARVATEK or HARVATEK INTERNATIONAL. As used herein:

- 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.

Official Product	HVR-5X3XRA	Customer Part No	Data Sheet No.	
	*********	*****	HVR-5X3XRA	
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Aug. 01, 2005	Version of 1.0	Page 2/8



## **Orderable Information**



Series Name	Color Code	Customer specific code
	5433RA = Bi-color GaP Green and Gap Yellow, 5mm lamp with 3-pin	
HVR= Harvatek Rectangular Lamp	5436RA = Bi-color GaP Green and GaP Orange, with 3-pin 5431RA = Bi-color GaP Green and GaP Red, with 3-pin	Customer Code =XXXX
	5336RA = Bi-color GaP Yellow and GaP Orange, with 3-pin	

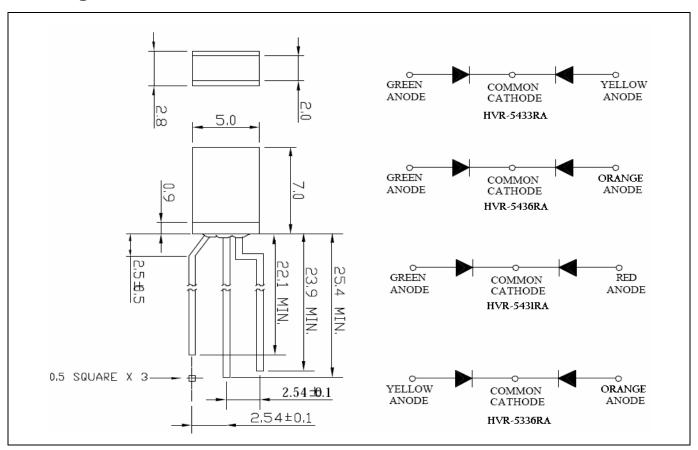
Official Product	HVR-5X3XRA	Customer Part No	Data Sheet No.	
	*********	*****	HVR-5X3XRA	
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Aug. 01, 2005	Version of 1.0	Page 3/8



#### Features:

- PCB indication capability
- Easy to assemble
- IC compatible
- Popular 5mm x 7mm rectangular lens
- 3 Leads
- White diffused lens

## Package dimension:



#### Note:

- 1. All Dimensions are in millimeters (inches)
- 2. Tolerance is +/- 0.25mm unless otherwise noted

Official Product	HVR-5X3XRA	Customer Part No.		Data Sheet No.
	*******	*****	HVR-5X3XRA	
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Aug. 01, 2005	Version of 1.0	Page 4/8



## Absolute maximum Rating (@ 25 degree C)

Parameter	Symbol	Green, Yellow,	Red	Unit
		and Orange		
Power Dissipation	Pd	78	90	mW
Reverse Voltage	Vr	5	5	V
Forward Current	<b>I</b> F	30	30	mA
Reverse Current	Ir	50	100	μΑ
Peak Current ( 1/10 Duty Cycle, 0.1ms pulse	IF (Peak)	100	50	mA
width )				
Operating Temperature Range	Topr	-25 to +85		° C
Storage Temperature Range	Tstg	-40 to +100		° C
Lead Soldering Temp		260		° C
Electrostatic discharge ( HBM)	ESD	5		KV

# Electrical and Optical Characteristic ( @ 25 degree C )

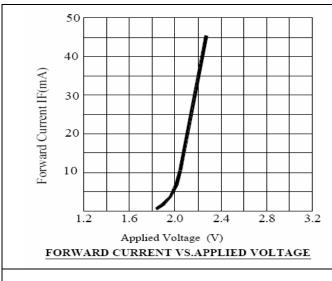
HVR-5X3XRA series						
Parameters	4 ( Green )	6 ( Orange )	1 ( Red )	3 (Yellow)	Test Condition	
Luminous Intensity:						
Min (mcd)	4.2	4.2	0.6	3.0	If=20mA	
Typ (mcd)	10.0	8.0	1.5	6.5	If=20mA	
Forward voltage (Vf)						
Тур	2.1	2.1	2.1	2.1	If=20mA	
Max	2.6	2.6	3.0	2.6	If=20mA	
Peak Wavelength (nm)	567	635	700	585	If=20mA	
Spectral line half width (nm)	30	35	100	35	If=20mA	
Viewing angle(degree)	85	85	85	85	If=20mA	

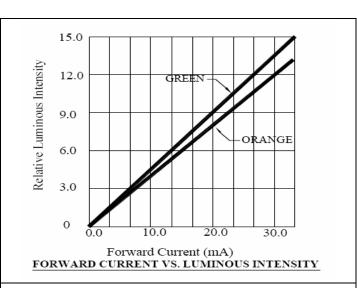
Brightness tolerance = +/- 15%

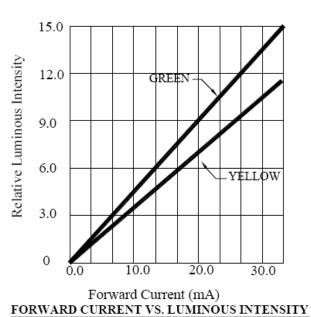
Official Product	HVR-5X3XRA	Customer Part No. Data Sheet No.			
	*********	*****	HVR-5X3XRA		
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Aug. 01, 2005	Version of 1.0	Page 5/8	

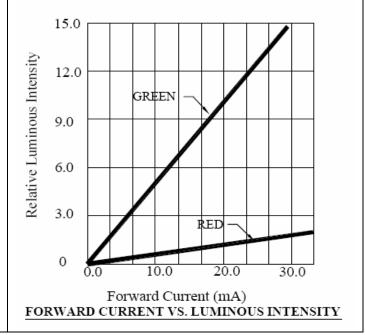


### **Characteristic Curves**



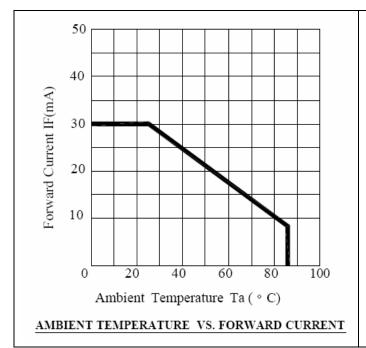


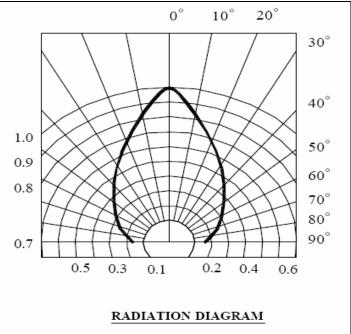




Official Product	HVR-5X3XRA	Customer Part No.		Data Sheet No.
	*********	*****	HVR-5X3XRA	
Specifications are subject drawings herein are copy	are subject to change without notice. Data and in are copyrighted.  Aug. 01, 2005  Version of 2		Version of 1.0	Page 6/8

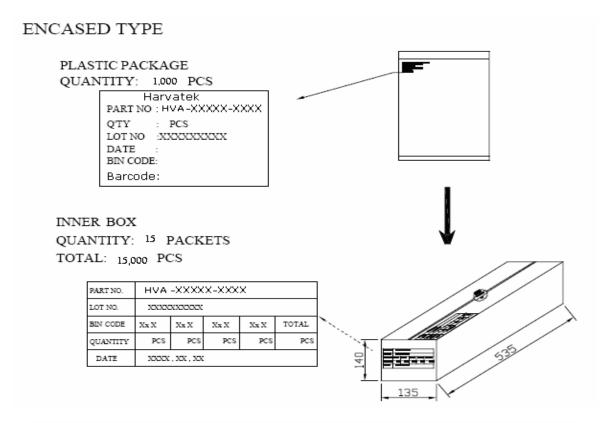


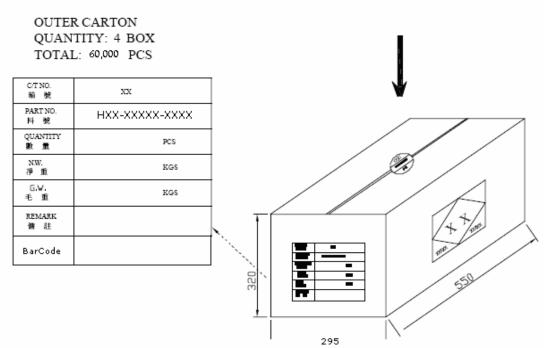




Official Product	HVR-5X3XRA	Customer Part No.		Data Sheet No.
	*********	*****	HVR-5X3XRA	
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Aug. 01, 2005	Version of 1.0	Page 7/8







Official Product	HVR-5X3XRA	Customer Part No	Data Sheet No.	
	*********	******	HVR-5X3XRA	
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Aug. 01, 2005	Version of 1.0	Page 8/8