

**Harvatek International 0.36" Quadruple Digit Display
HCD89330**

Official Product	HCD89330	Customer Part No.	Data Sheet No.
	*****	*****	HCD89330
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Revision History

Revision	Page	Version No.	Revision Date
DS original		1.0	11-02-2016
Update spec.		1.1	11-07-2016
Update IV spec.		1.2	11-16-2016
Update spec.		1.3	11-17-2016
Update PRINTING TAPE	3,4,6	1.4	04-26-2017

Official Product	HCD89330	Customer Part No.	Data Sheet No.
	*****	*****	HCD89330
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Apr 27, 2017	Version of 1.4 Page 2/8

DISCRIPION

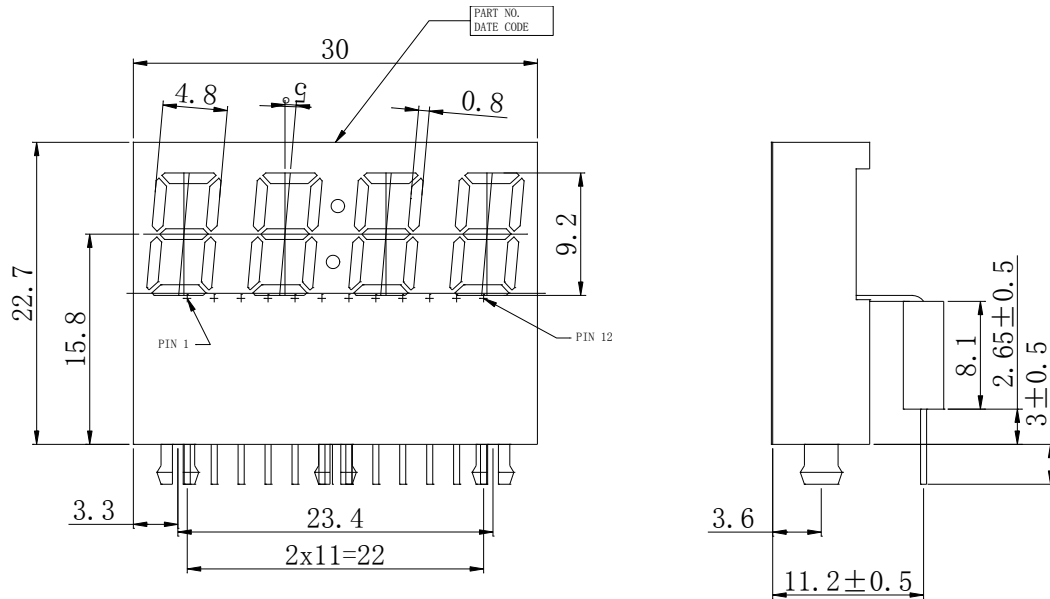
This HCD89330 is a 0.36 inch (9.2mm) digit height quadruple digit seven-segment display. This device uses blue LED chips(InGaN epi on SiC substrate) ,The display has black face and white segments with printing tape.

FEATURES

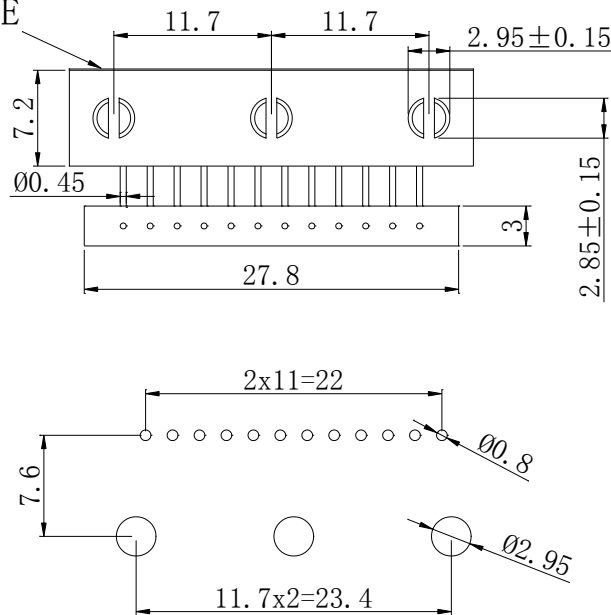
- * 0.36 inch (9.2mm) digit height
- * Continuous uniform segments
- * LOW POWER REQUIREMENT
- * SINGLE PLANE, WIDE VIEWING ANGLE
- * COMPATIBLE WITH USASCLL AND EBCDIC CODES
- * STACKABLE HORIZONTALLY
- * SOLID STATE RELIABILITY
- * CATEGORIZED FOR LUMINOUS INTENSITY
- * LEAD-FREE PACKAGE

Official Product	HCD89330	Customer Part No.	Data Sheet No.
	*****	*****	HCD89330
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Apr 27, 2017	Version of 1.4
			Page 3/8

PACKAGE DIMENSIONS



PRINTING TAPE (0.2mm)

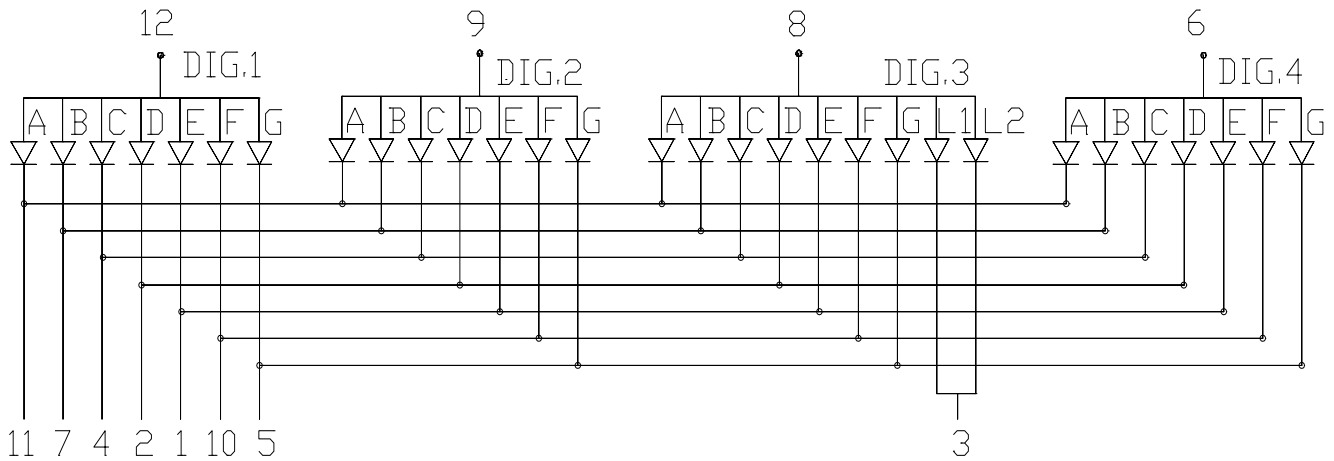
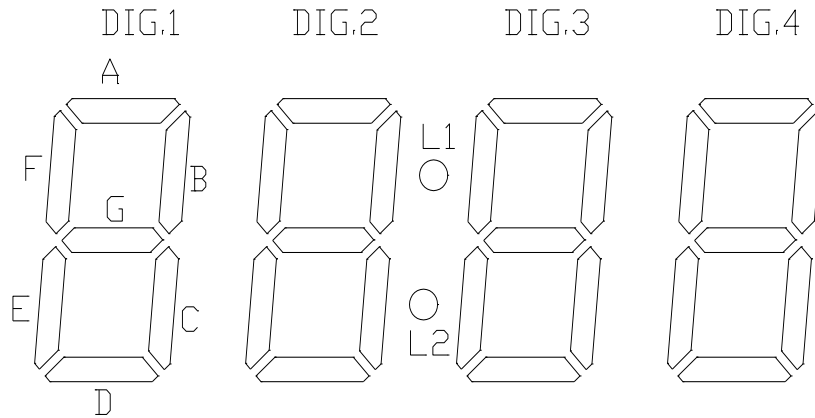


NOTES:

1. All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
2. Printing tape thickness is 0.25mm.

Official Product	HCD89330	Customer Part No.	Data Sheet No.
	*****	*****	HCD89330
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Apr 27, 2017	Version of 1.4
			Page 4/8

INTERNAL CIRCUIT DIAGRAM



Official Product	HCD89330	Customer Part No.	Data Sheet No.
	*****	*****	HCD89330
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Apr 27, 2017	Version of 1.4
			Page 5/8

ABSOLUTE MAXIMUM RATING AT Ta = 25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per segment	70	mW
Peak Forward Current (Frequency 1Khz, 15% duty cycle)	100	mA
Continuous Forward Current Per segment	20	mA
Reverse Voltage Per segment	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-25°C to +85°C	
Soldering Conditions:Max 260°C for max 3sec at 1.6mm below seating plane.		

Remarks:This product should be operated in forward bias.If a reverse voltage is continuously applied to the product, such operation can cause migration resulting in LED damage.

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25°C

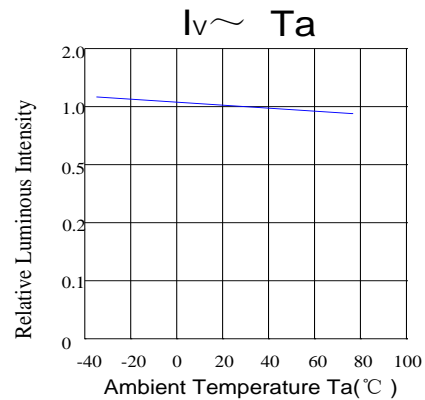
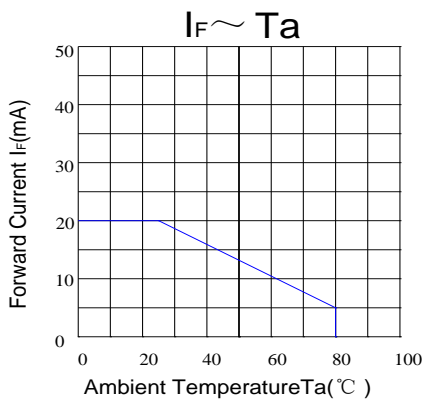
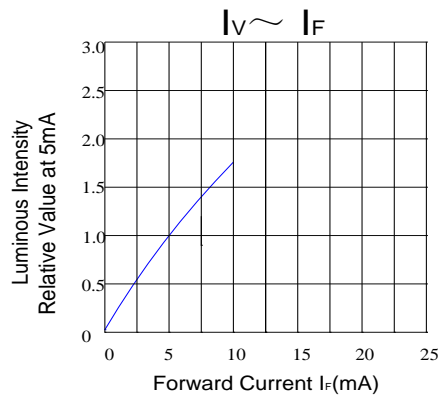
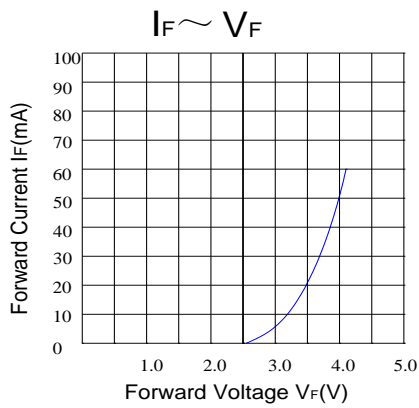
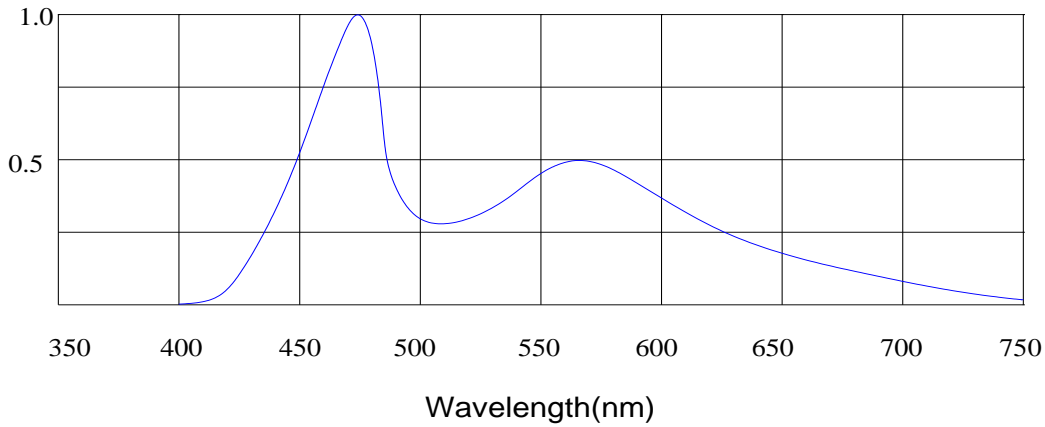
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity	Iv	10	16		mcd	IF=10mA
CIE	x		0.27		nm	IF=20mA
	y		0.26		nm	IF=20mA
Forward Voltage Per Segment	VF		3.0	3.6	V	IF=20mA
Reverse Current Per Segment	IR			100	μA	VR=5V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=10mA

Note:Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

Official Product	HCD89330	Customer Part No.	Data Sheet No.
	*****	*****	HCD89330
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Apr 27, 2017	Version of 1.4 Page 6/8

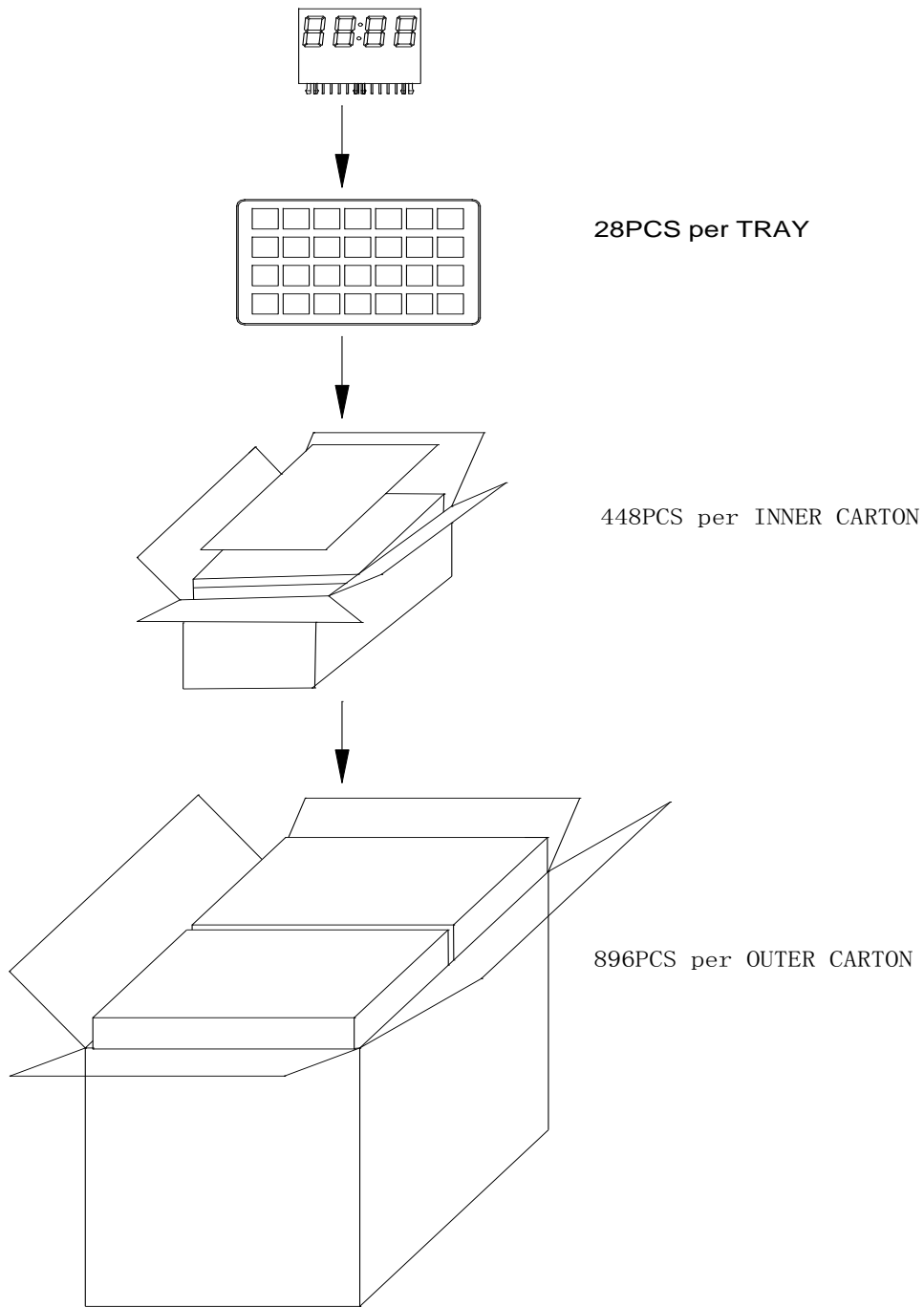
TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES (25°C Ambient Temperature Unless Otherwise Noted)

RELATIVE INTENSITY vs WAVELENGTH



Official Product	HCD89330	Customer Part No.	Data Sheet No.
	*****	*****	HCD89330
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Apr 27, 2017	Version of 1.4
			Page 7/8

Pack process:



Official Product	HCD89330	Customer Part No.	Data Sheet No.
	*****	*****	HCD89330
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Apr 27, 2017	Version of 1.4
			Page 8/8