

**Harvatek International 0.12" Dot Matrix Display Data Sheet
HCD89203**

Official Product	HCD89203	Customer Part No.	Data Sheet No.
	*****	*****	HCD89203
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Revision History

Revision	Page	Version No.	Revision Date
DS original		1.0	10-21-2014

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DISCLAIMER

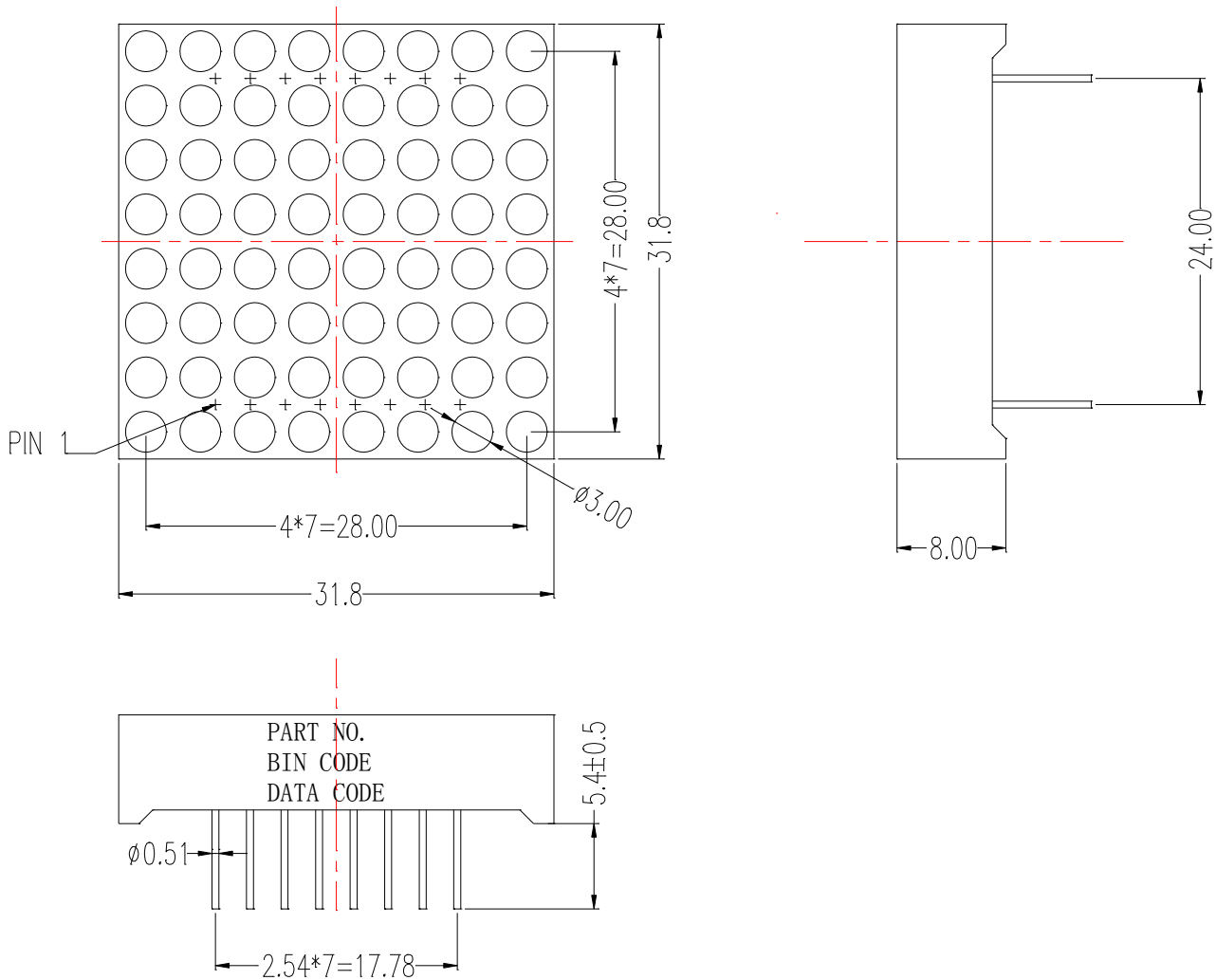
This HCD89203 is a 0.12 inch (3.0mm) dot height 8x8 dot matrix display.
This device utilizes white SMD LED, and has a black face and white segments .

FEATURES

- * 0.12-inch (3.0mm) dot height
- * 8x8 array with x-y select
- * LOW POWER REQUIREMENT
- * EXCELLENT CHARACTERS APPEARANCE
- * HIGH BRIGHTNESS & HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * CATEGORIZED FOR LUMINOUS INTENSITY
- * LEAD-FREE PACKAGE

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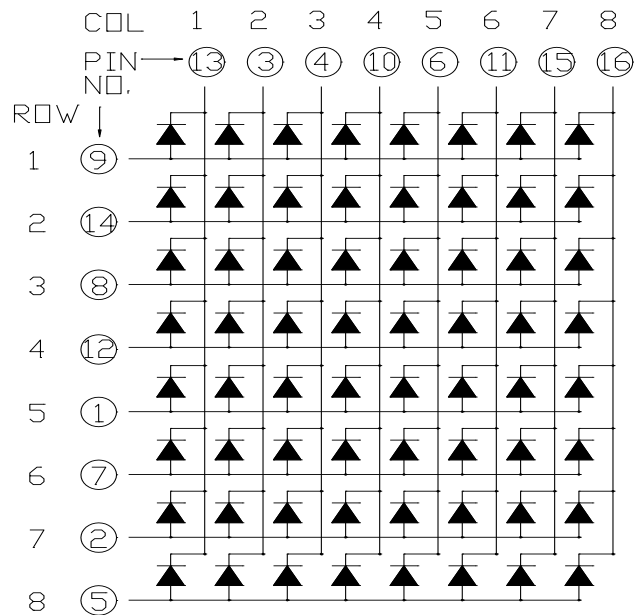
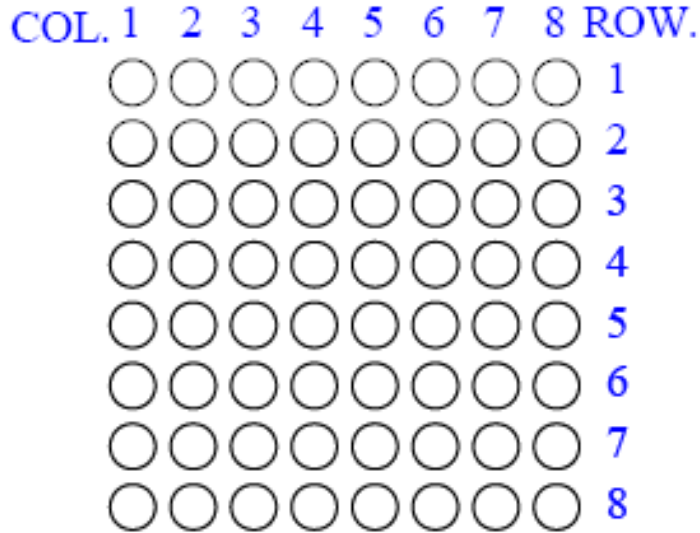
PACKAGE DIMENSIONS



NOTES: 1. All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.

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INTERNAL CIRCUIT DIAGRAM



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ABSOLUTE MAXIMUM RATING AT Ta = 25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	78	mW
Continuous Forward Current	20	mA
Peak Forward Current	60	mA
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-40°C to +85°C	
Storage Temperature Range	-40°C to +85°C	
Soldering Conditions:Max 260°C for max 3sec at 1.6mm below seating plane.		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25°C

PARAMETER	SYMBOL	MIN.	TYP	Max	UNIT	TEST CONDITION
Average Luminous Intensity	lv		60	-	mcd	IF=5mA
Peak Emission Wavelength	□ p	X	0.285	-	nm	IF=5mA
Spectral Line Half-Width		Y	0.275	-		
Forward Voltage Per Segment	VF	-	3.0	3.4	V	IF=5mA
Reverse Current Per Segment	IR	-		30	□ uA	VR=5V
Luminous Intensity Matching Ratio	lv-m	-		1: 2		IF=5mA

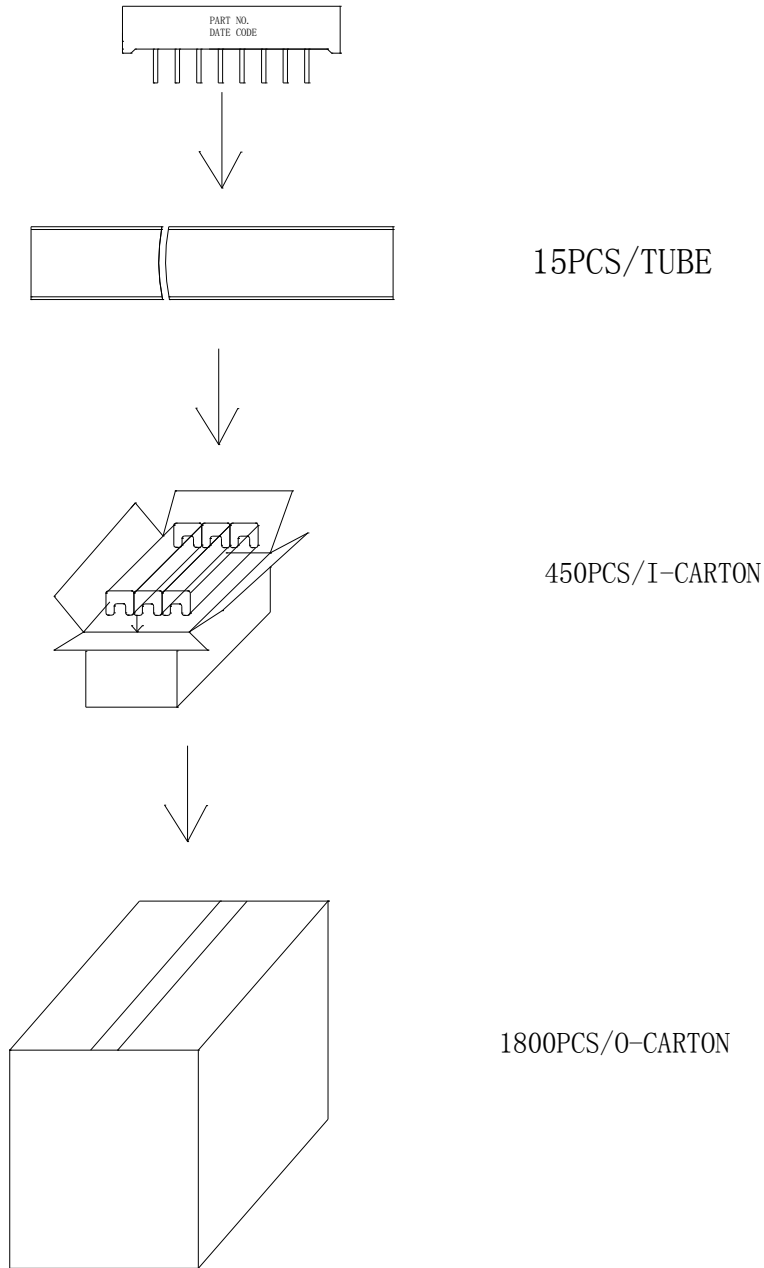
Note:Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

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

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Package Flow



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