

**Harvatek 0.39" SMD Quadruple Digit Display
HCD89428**

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Revision History

Revision	Page	Version No.	Revision Date
DS original		1.0	2017-10-18

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DESCRIPTION

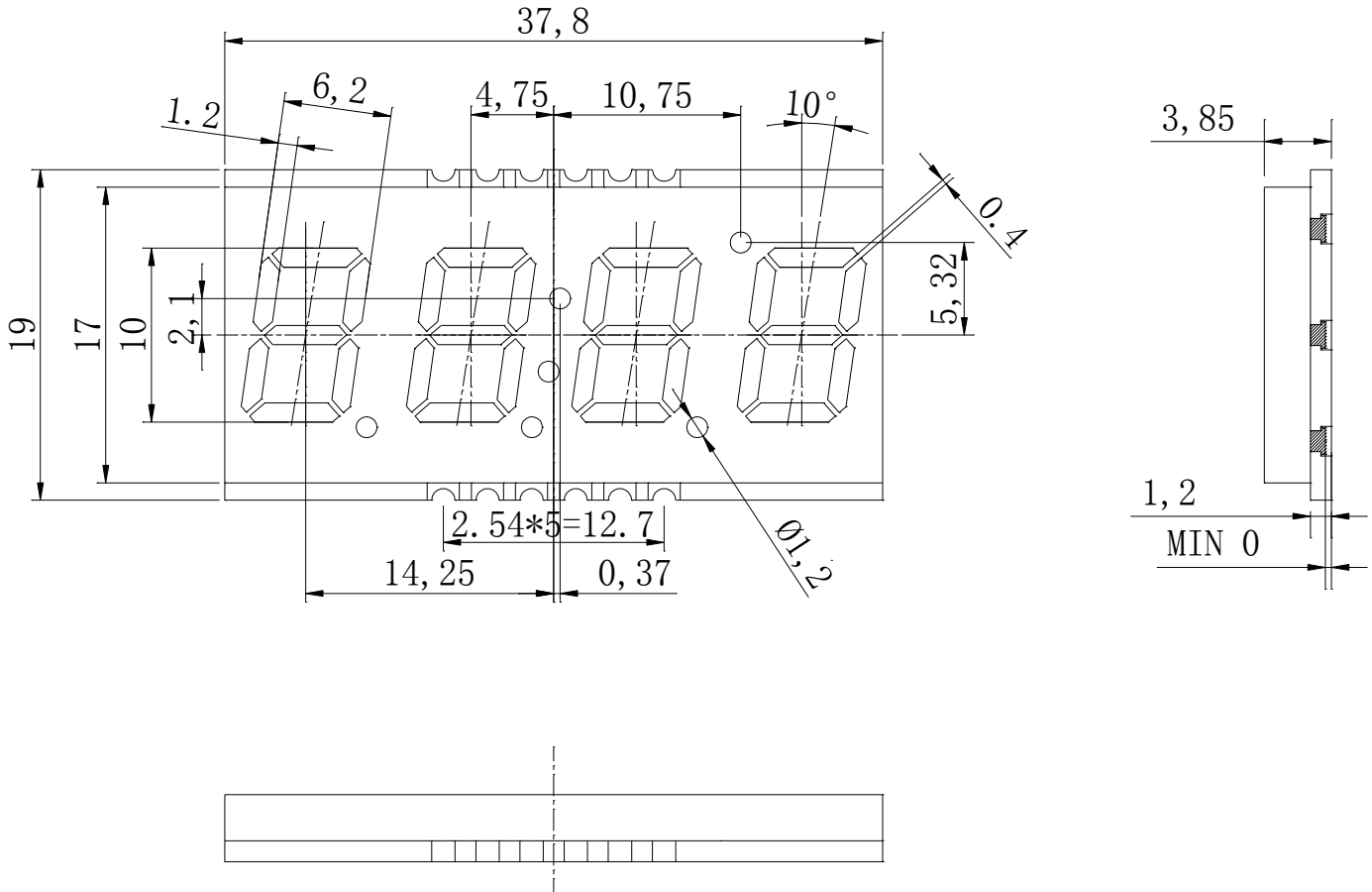
This device is a 0.39 inch (10mm) digit height quadruple digit seven-segment display.
This device utilizes 0603 WHITE LED ,The display has a black face and white segment.

FEATURES

- *0.39-inch (10 mm) DIGIT HEIGHT
- *CONTINUOUS UNIFORM SEGMENTS
- *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

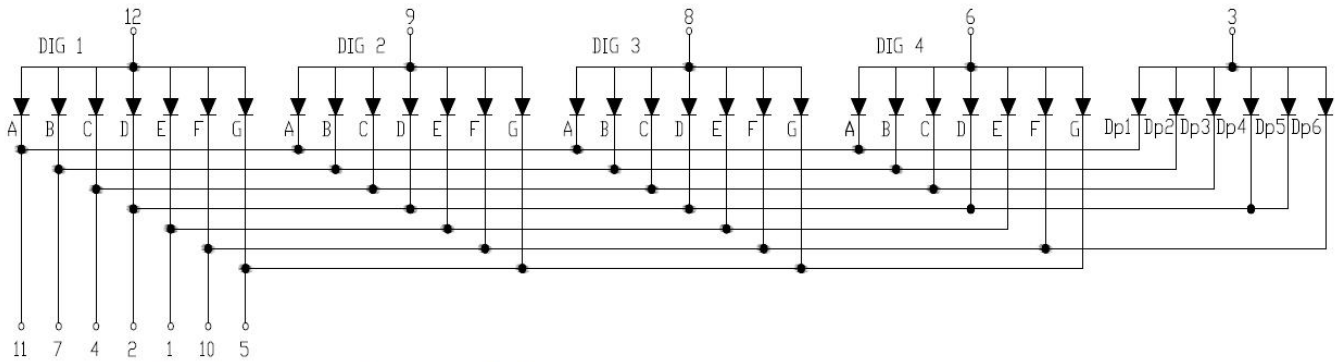
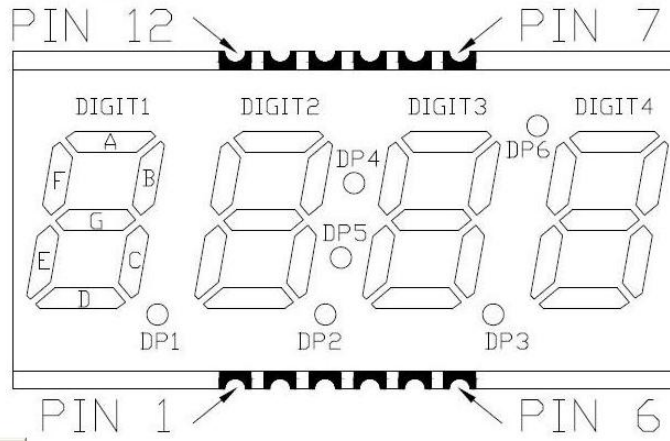


NOTES:

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	Max.	UNIT
Power Dissipation Per Segment	78	mW
Continuous Forward Current Per Segment	20	mA
Peak Forward Current (Frequency 1Khz,15% duty cycle)	60	mA
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25°C

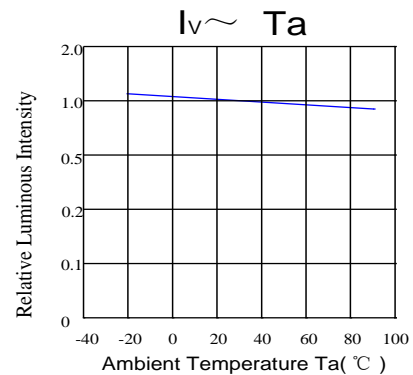
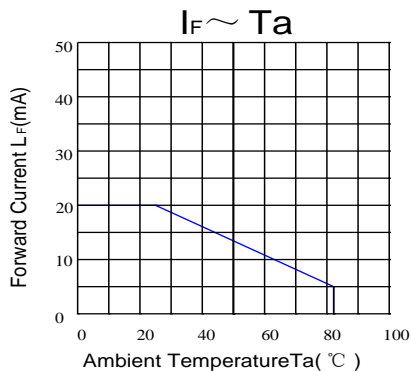
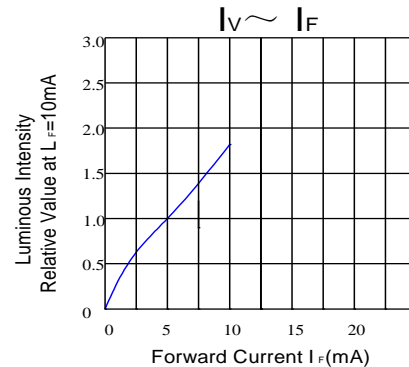
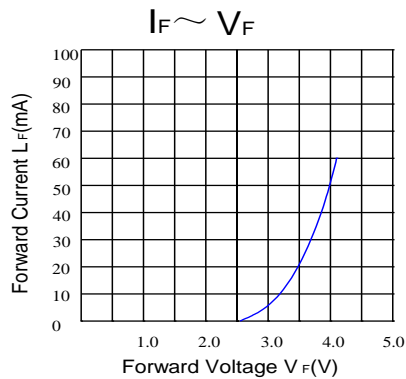
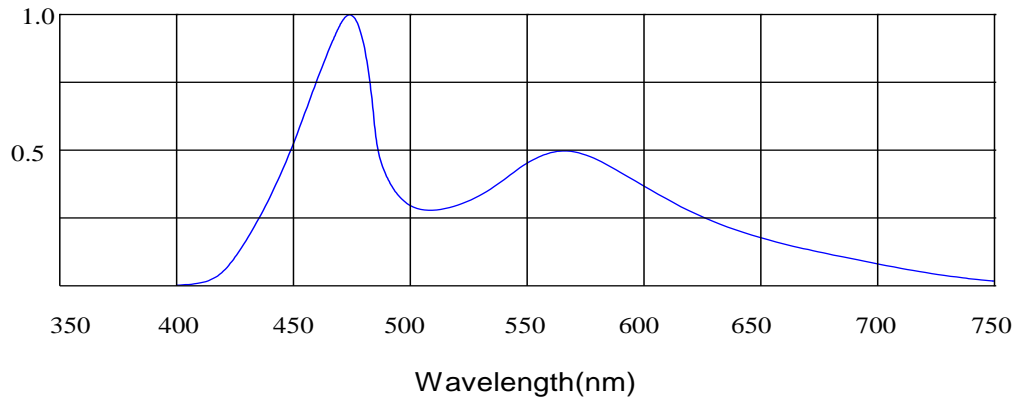
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	21.7	43.7		mcd	IF=5mA
Peak Emission Wavelength	λp	x	0.285		nm	IF=5mA
Spectral Line Half-Width		y	0.275			
Forward Voltage Per Segment	VF		3.2	3.8	V	IF=5mA
Reverse Current Per Segment	IR			10	μA	VR=5V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=5mA

- Note: 1.Luminous Intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.
 2. Reverse voltage is only for IR test. It can not continue to operate at this situation.
 3. Cross talk specification ≤2.5%

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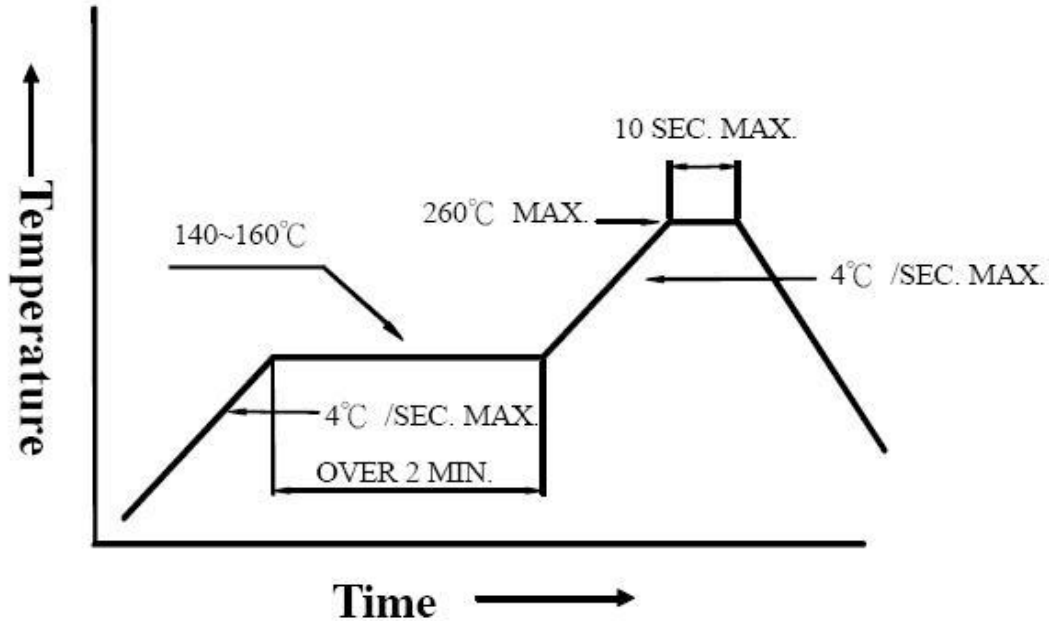
TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES (25°C Ambient Temperature Unless Otherwise Noted)

RELATIVE INTENSITY vs WAVELENGTH

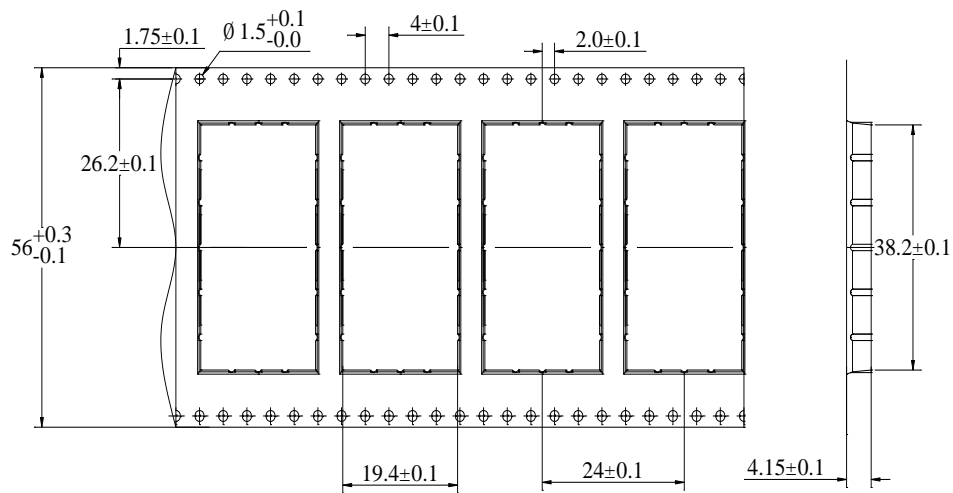


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Reflow Soldering

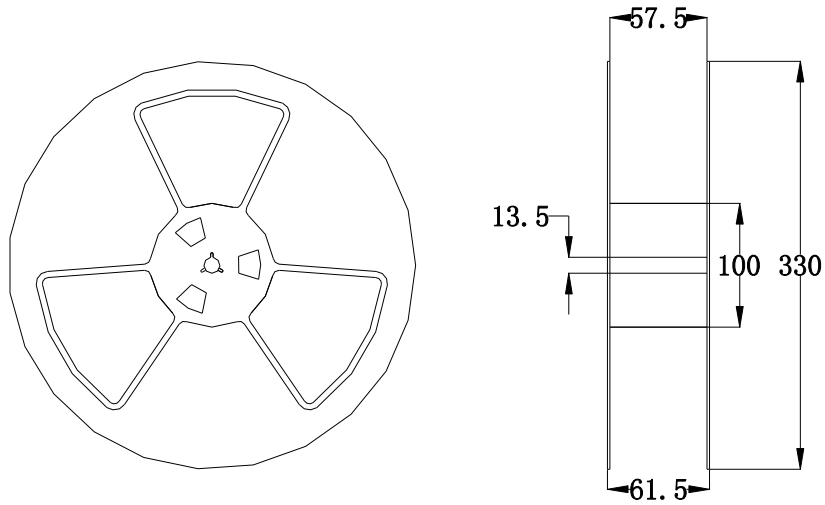


TAPE SPECIFICATION (UNIT: mm)

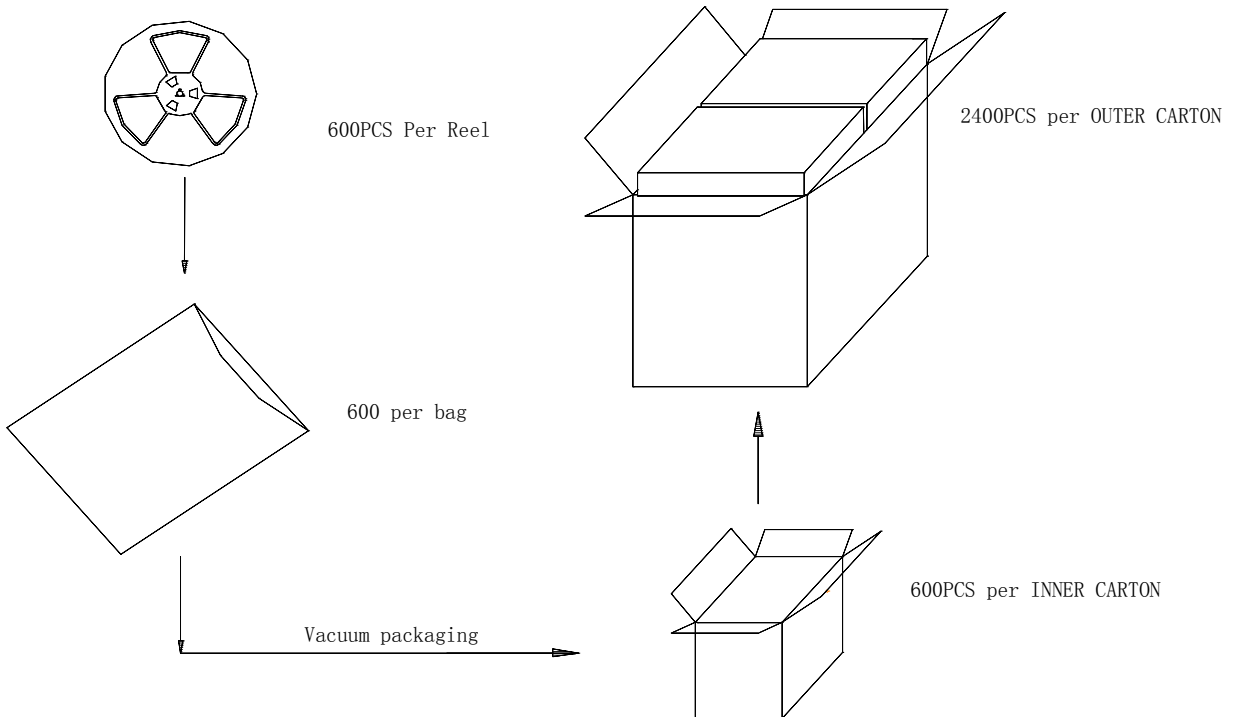


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REEL SPECIFICATION(UNIT: MM)



Package Flow



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