

**Harvatek International 0.56" Quad Digits Numeric Display
HCD88532**

Official Product	HCD88532	Customer Part No.	Data Sheet No.
	*****	*****	HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.	Nov. 18, 2009	Version of 1.2	Page 1/10

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	HCD88532	Customer Part No.		Data Sheet No.
	*****	*****		HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Nov. 18, 2009	Version of 1.2	Page 2/10

Orderable Information

H C D 8 8 5 3 2

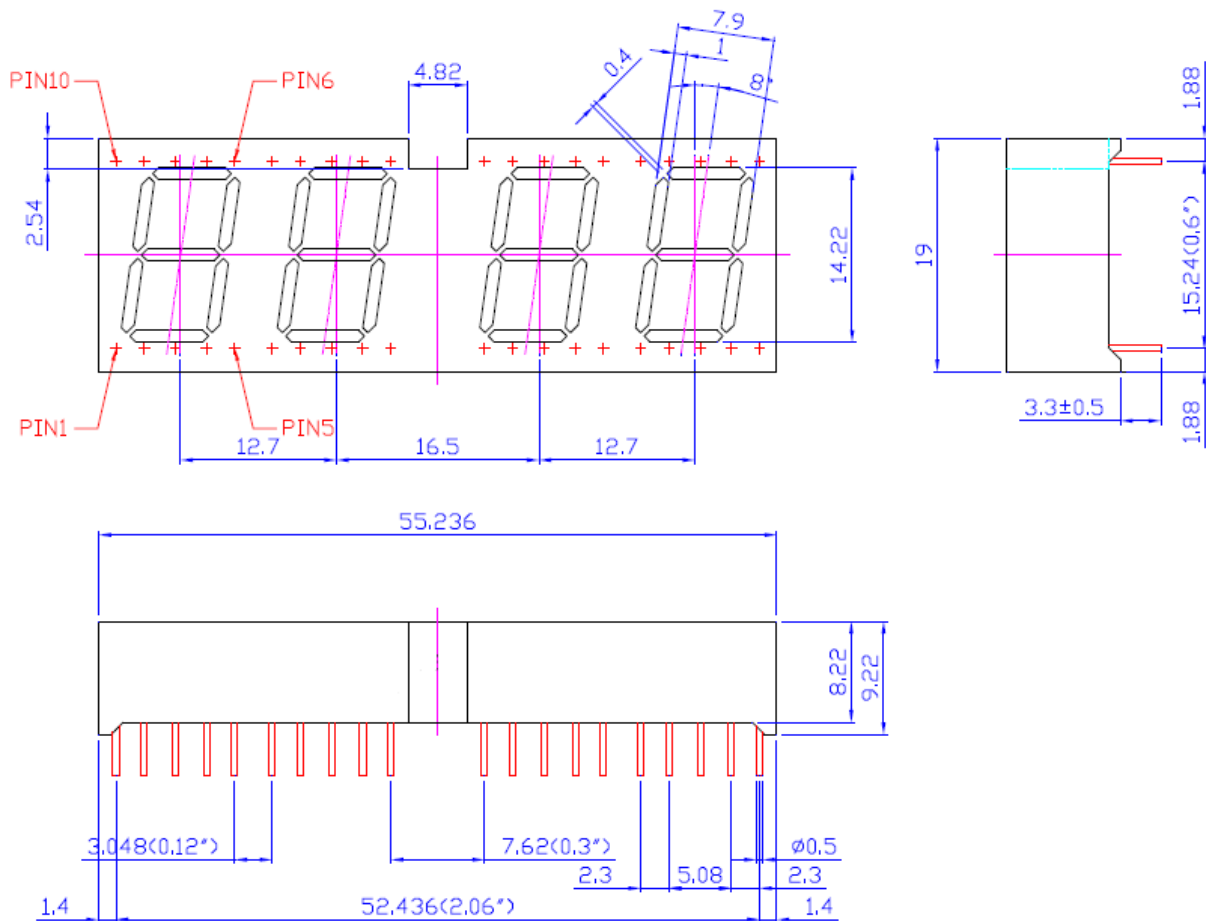


Series Name	Color Code
HCD= Harvatek Customized Display	88532= 0.56" Quad Digits Display, White, Common Anode, Grey Face, White Segment

Official Product	HCD88532	Customer Part No.		Data Sheet No.
	*****	*****		HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Nov. 18, 2009	Version of 1.2	Page 3/10

Features:

- 0.56 inch (14.22 mm) Digit Height.
- Excellent character appearance.
- SMD type.
- Grey face, White segment.
- Low current operation.
- RoHS compliant, Pb Free.



1. Dimensions in millimeter (inch)
2. Tolerance is ± 0.25 (0.01") specified

Official Product	HCD88532	Customer Part No.	Data Sheet No.
	*****	*****	HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Nov. 18, 2009	Version of 1.2
			Page 4/10

Absolute maximum Rating (@ 25 degree C)

Parameter	Symbol	Spec	Unit
Power Dissipation per segment	P _d	64	mW
Reverse Voltage Per Segment	V _r	5	V
Forward Current Per Segment	I _F	20	mA
Peak Current Per Segment(1/10 Duty Cycle, 0.1ms pulse width)	I _F (Peak)	80	mA
Operating Temperature Range	T _{opr}	-30 to + 85	° C
Storage Temperature Range	T _{stg}	-40 to + 90	° C
Derating Linear From 25° C Per Segment		0.3	mA/° C

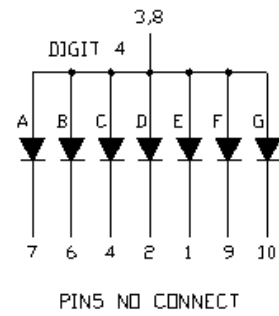
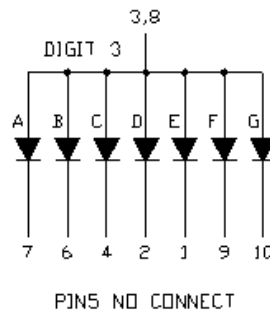
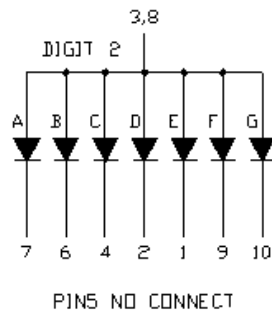
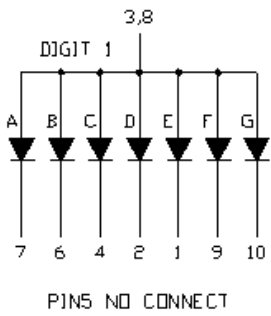
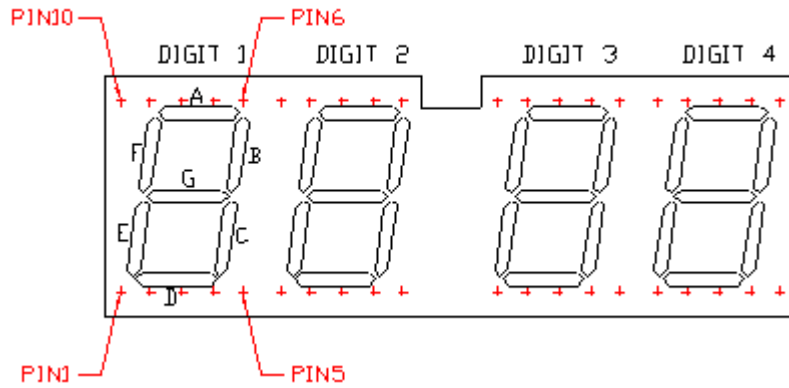
Electrical and Optical Characteristic (@ 25 degree C)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage per dot	V _F	I _F =5mA	-	2.95	-	V
Luminous intensity per dot	I _V	I _F =5mA	-	180	-	mcd
Chromatically Coordinates	X	I _F =5mA	-	0.29	-	nm
	Y		-	0.31	-	nm
Luminous intensity matching ratio	I _{V-m}	I _F =5mA	-	1:1.5	-	-

Luminous Intensity tolerance = +/- 15%

Official Product	HCD88532	Customer Part No.		Data Sheet No.
	*****	*****		HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Nov. 18, 2009	Version of 1.2	Page 5/10

Schematic Drawing



Official Product	HCD88532	Customer Part No.	Data Sheet No.
	*****	*****	HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Nov. 18, 2009	Version of 1.2
			Page 6/10

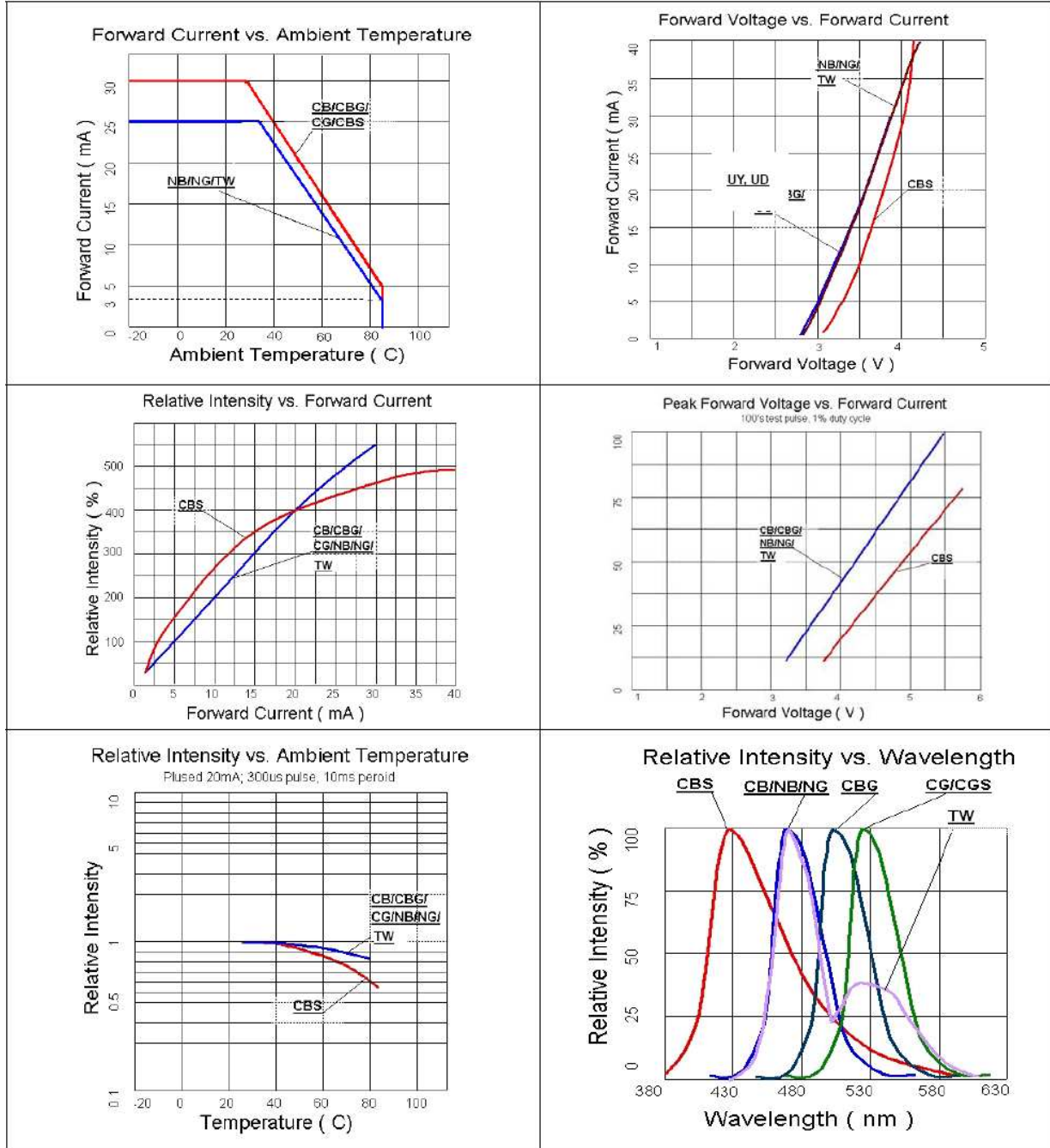
Pin Table:

Pin Out #	HCD88533 (Digit 1)	Pin Out #	HCD88533 (Digit 2)
Pin 1	Cathode for Segment E	Pin 1	Cathode for Segment E
Pin 2	Cathode for Segment D	Pin 2	Cathode for Segment D
Pin 3	Common Anode Digit 1	Pin 3	Common Anode Digit 2
Pin 4	Cathode for Segment C	Pin 4	Cathode for Segment C
Pin 5	No Connect	Pin 5	No Connect
Pin 6	Cathode for Segment B	Pin 6	Cathode for Segment B
Pin 7	Cathode for Segment A	Pin 7	Cathode for Segment A
Pin 8	Common Anode Digit 1	Pin 8	Common Anode Digit 2
Pin 9	Cathode for Segment F	Pin 9	Cathode for Segment F
Pin 10	Cathode for Segment G	Pin 10	Cathode for Segment G

Pin Out #	HCD88533 (Digit 3)	Pin Out #	HCD88533 (Digit 4)
Pin 1	Cathode for Segment E	Pin 1	Cathode for Segment E
Pin 2	Cathode for Segment D	Pin 2	Cathode for Segment D
Pin 3	Common Anode Digit 3	Pin 3	Common Anode Digit 4
Pin 4	Cathode for Segment C	Pin 4	Cathode for Segment C
Pin 5	No Connect	Pin 5	No Connect
Pin 6	Cathode for Segment B	Pin 6	Cathode for Segment B
Pin 7	Cathode for Segment A	Pin 7	Cathode for Segment A
Pin 8	Common Anode Digit 3	Pin 8	Common Anode Digit 4
Pin 9	Cathode for Segment F	Pin 9	Cathode for Segment F
Pin 10	Cathode for Segment G	Pin 10	Cathode for Segment G

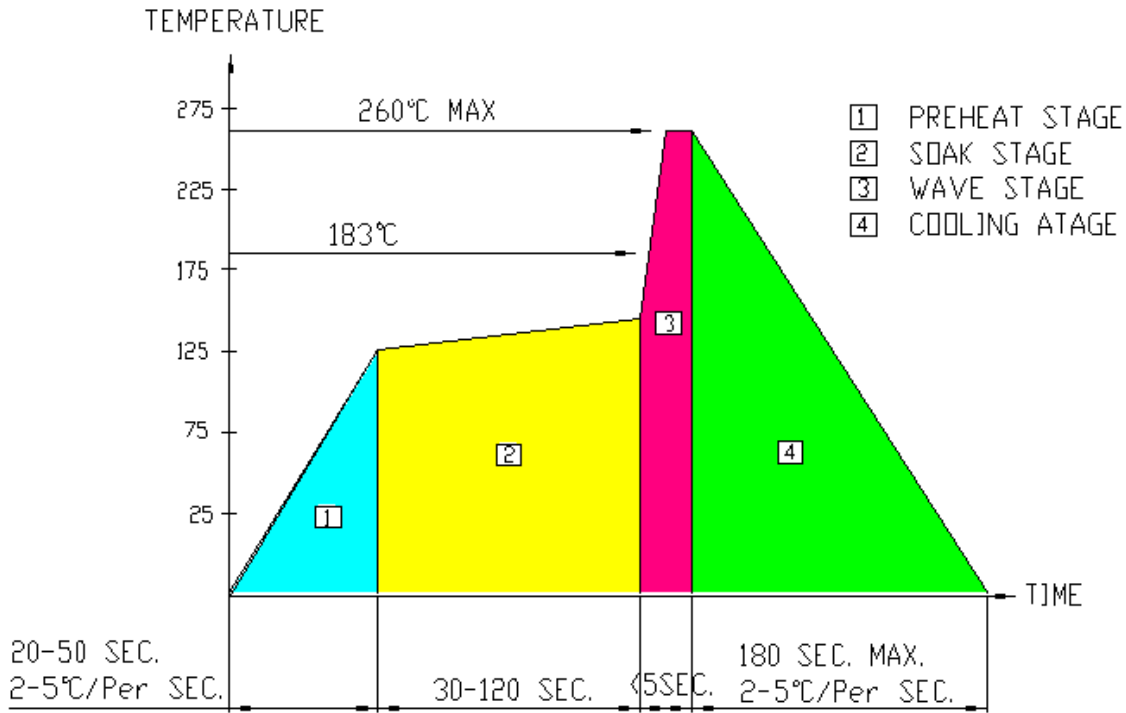
Official Product	HCD88532	Customer Part No.	Data Sheet No.
	*****	*****	HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Nov. 18, 2009	Version of 1.2
			Page 7/10

Characteristic Curves:



Official Product	HCD88532	Customer Part No.	Data Sheet No.
	*****	*****	HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.	Nov. 18, 2009	Version of 1.2	Page 8/10

RECOMMEND WAVE SOLDER PROFILE



SOLDERING IRON

Basic spec is ≤ 4 sec when 260°C. If temperature is higher, time should be shorter (+10°C → 1 sec). Power dissipation of Iron should be smaller than 15W, and temperature should be controllable.

Surface temperature of the device should be under 230°C.

REWORK

Customer must finish rework within ≤ 4 sec under 245°C.

Official Product	HCD88532	Customer Part No.	Data Sheet No.
	*****	*****	HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Nov. 18, 2009	Version of 1.2
			Page 9/10

Revision History

Revision	Page	Version No.	Revision Date
Initial Release stamp-off HCD88532		1.0	06-30-2009
Update Pin Table		1.1	07-01-2009
Update		1.2	11-18-2009

Official Product	HCD88532	Customer Part No.	Data Sheet No.
	*****	*****	HCD88532
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		Nov. 18, 2009	Version of 1.2 Page 10/10