Harvatek International 0.4” Triple Digits Display
HNT4242B

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.

Orderable Information

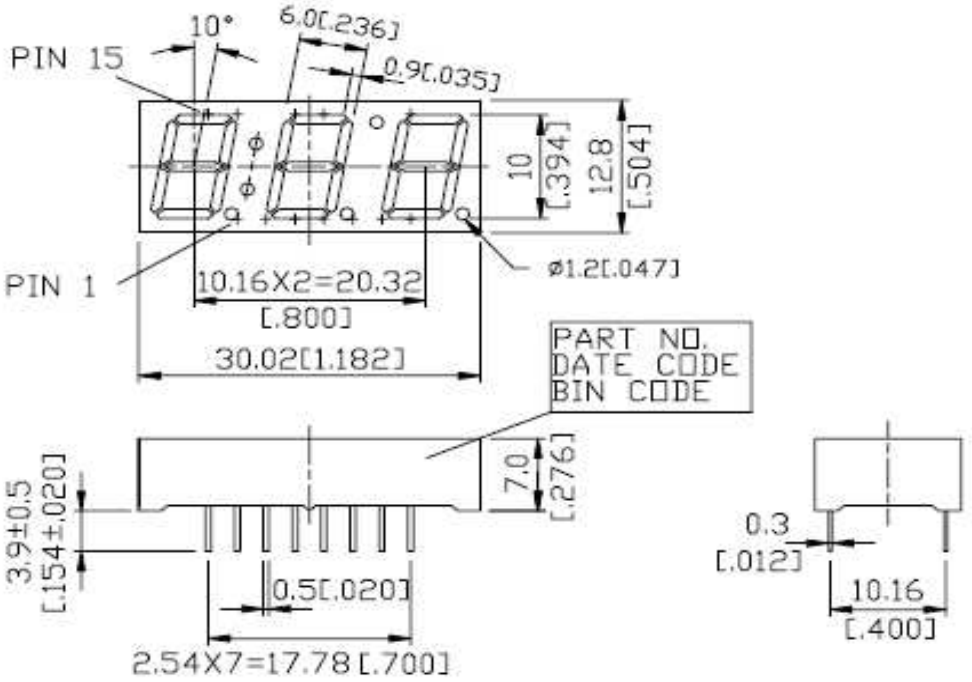
Official Product	HNT4242B	Customer Part No.		Data Sheet No.
	**********	**********		HNT4242B
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		October. 5, 2010	Version of 1.1	Page 2/9

H	N	T	4	2	4	2	B

Series Name	Color Code
HNT= Harvatek Triple Display	4242B= 0.4” Triple Digits Display, Red, Common Anode, Gray Face and White Segments.

Features:

- 0.4-inch (10.16 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
- RoHS compliant, Pb Free.



1. Dimensions in millimeter (inch)
2. Tolerance is ±0.25 (0.01”) specified
3. Pin tip’s shift tolerances is +/-0.4mm.

Absolute maximum Rating (@ 25 degree C)

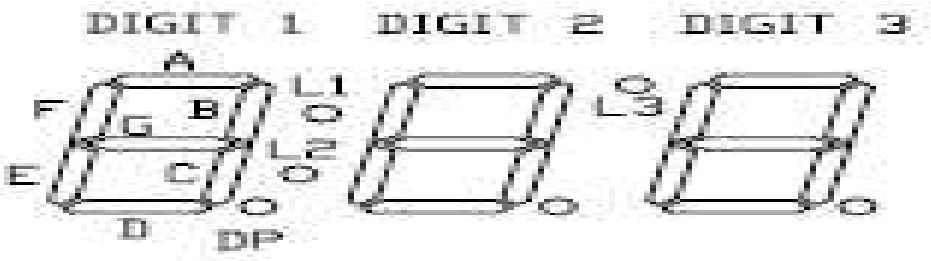
Parameter	Symbol	Spec	Unit
Power Dissipation per segment	Pd	70	mW
Reverse Voltage Per Segment	Vr	5	V
Forward Current Per Segment	IF	25	mA
Peak Current Per Segment	IF (Peak)	90	mA
Operating Temperature Range	Topr	-35 to + 85	° C
Storage Temperature Range	Tstg	-35 to + 85	° C
Soldering Conditions : Max 260℃ for max 3sec at 1.6mm below seating plane.			

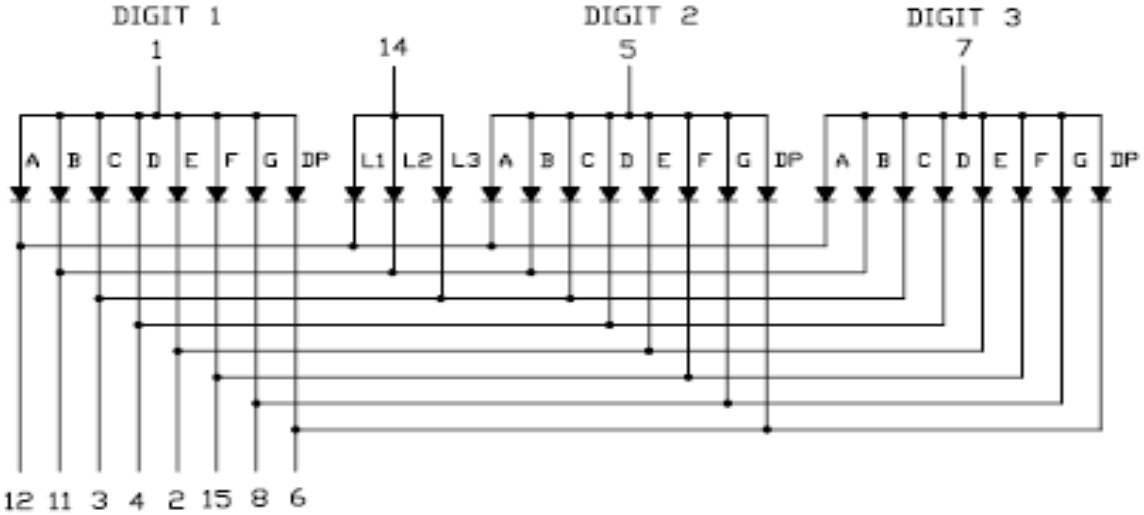
Electrical and Optical Characteristic (@ 25 degree C)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage per dot	V_F	I_F=20mA	1.8	2.0	2.6	V
Luminous intensity per dot	I_V	I_F=1mA	200	650	-	ucd
Peak Emission Wavelength	λp	I_F=20mA	-	650	-	nm
Dominant wavelength	λ D	I_F=20mA	-	639	-	nm
Spectrum radiation bandwidth	△λ	I_F=20mA		20		nm
Reverse current	I_R	V_R=5V	-	-	100	μ A
Luminous Intensity Matching Ratio	Iv-m	I_F=10mA		2:1		

Luminous Intensity tolerance = +/- 20%

Schematic Drawing

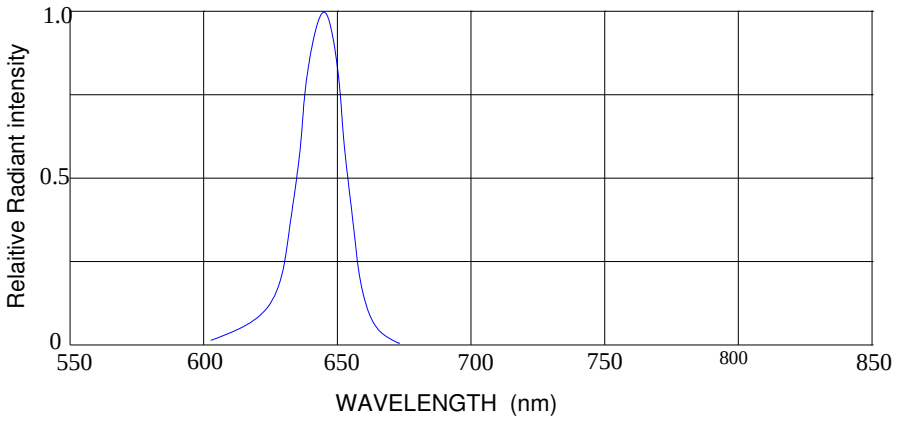




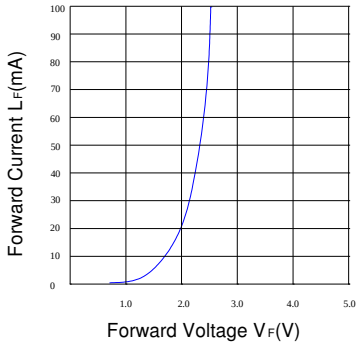
TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

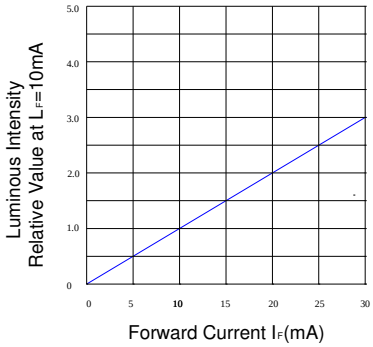
RELATIVE INTENTY VS WAVELENGT H



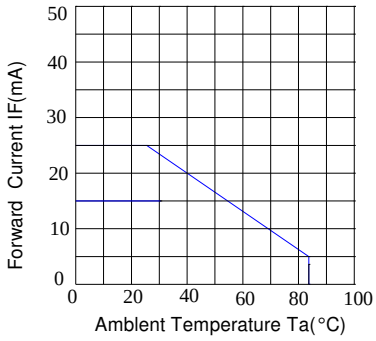
$I_F \sim V_F$



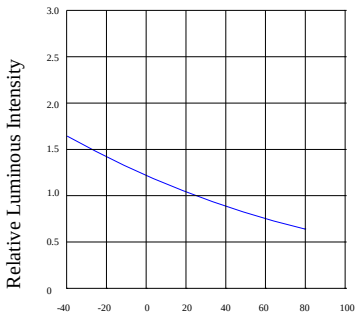
$I_V \sim I_F$



IF~Ta

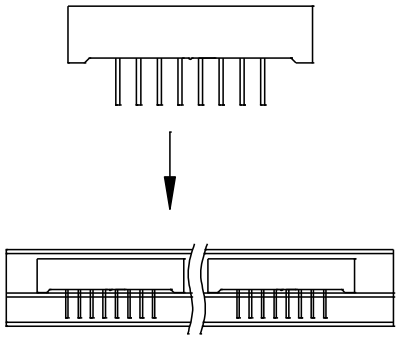


$I_V \sim$ Ta

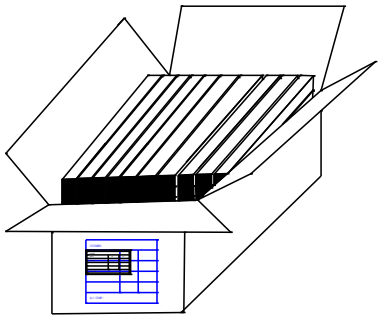


Ambient Temperature Ta(℃)

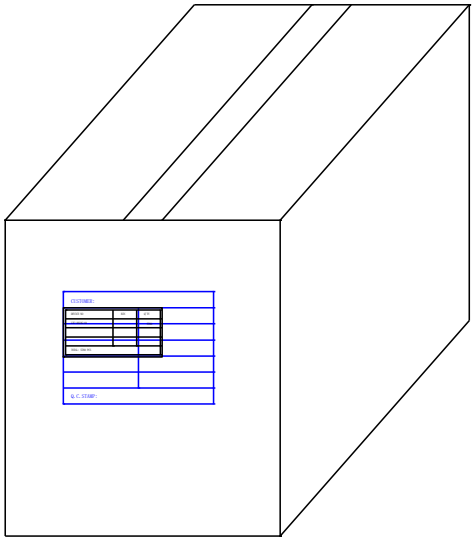
Packing Flow：



16pcs/ Tube



1408pcs/ Inner Carton



5632pcs/ Outside Carton

SOLDERING IRON

Basic spec is ≦4 sec when 260℃. If temperature is higher, time should be shorter (+10℃→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℃.

REWORK

Customer must finish rework within ≦4 sec under 245℃.

Revision History

Revision	Page	Version No.	Revision Date
Initial Release stamp-off HNT4242B		1.0	07-15-2010
Update TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES & add Packing Flow	7,8	1.1	10-05-2010