AVA TECHNOLOGY CO.

Technical Specification

Model: ND39G1
Name: .39″Seven-Segment Display
REV: A
Date: 2006-1-6

AVA TECHNOLOGY CO.
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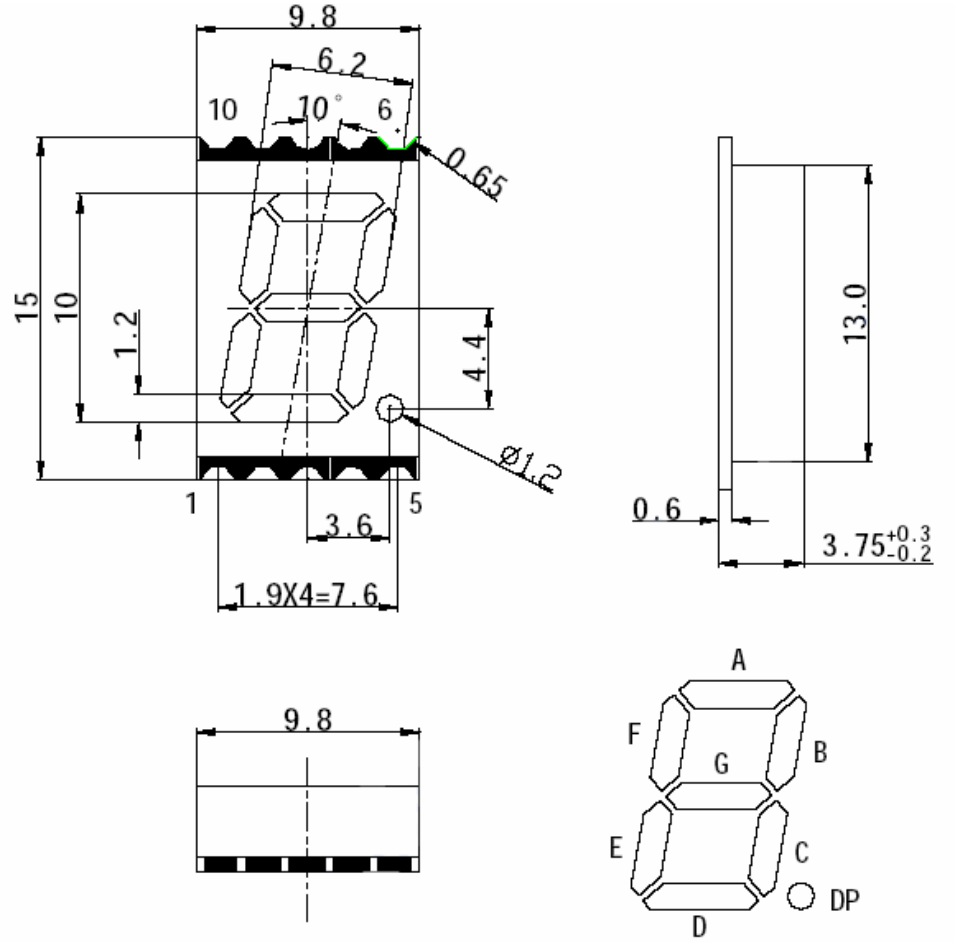
DESCRIPTION• •

THE GREEN SOURCE COLOR DEVICES
ARE MADE WITH InGaAlP ON GaAs
SUBSTRATE LIGHT EMITTING DIODE

FEATURES

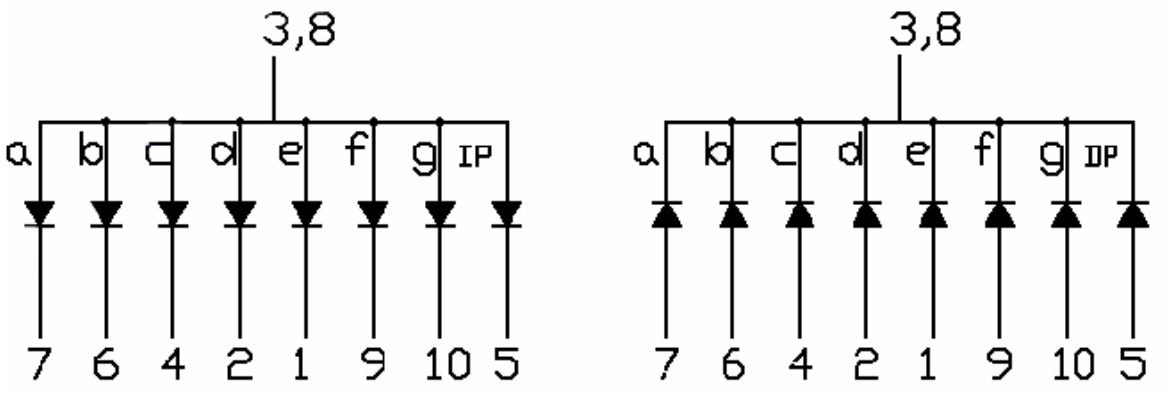
* 0.39 inch (10.0 mm) DIGIT HEIGHT
* CONTINUOUS UNIFORM SEGMENTS
* LOW POWER REQUIREMENT
* EXCELLENT CHARACTERS APPEARANCE
* HIGH BRIGHTNESS & HIGH CONTRAST
* WIDE VIEWING ANGLE
* SOLID STATE RELIABILITY
* CATEGORIZED FOR LUMINOUS INTENSITY
* THE CHARACTERISTIC OF ENCAPXULATION METHOD IS USE THE CHIP ON BORAD OR SMT

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are ± 0.25-mm (0.01“) unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



Selection Gulde

Part No.	Dice	Lens Type	Iv (mcd) @10mA		Description
			Min.	Typ.	
ND39G1AYG-S	GREEN (InGaAlP)	WHITE DIFFUSED	11.08	12.04	Common Anode
ND39G1CYG-S	GREEN (InGaAlP)	WHITE DIFFUSED	11.08	12.04	Common Cathode

ABSOLUTE MAXIMUM RATING AT Ta = 25oC

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	105	mW
DC Froward Current	25	mA
Peak Froward Current	140	mA
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-40^0C to $+85^0$C	

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25°C

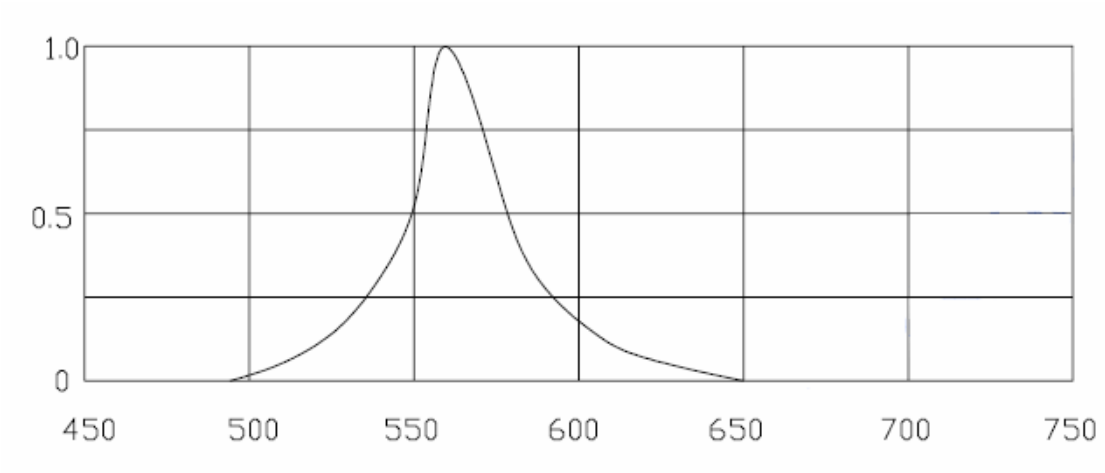
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Peak Emission Wavelength	λp		573		nm	I_F=20mA
Spectral Line Half-Width	Δλ		30		nm	I_F=20mA
Dominant Wavelength	λd		570		nm	I_F=20mA
Forward Voltage Per Segment	V_F		2.15	2.5	V	I_F=20mA
Reverse Current Per Segment	I_R			10	μA	V_R=5V

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

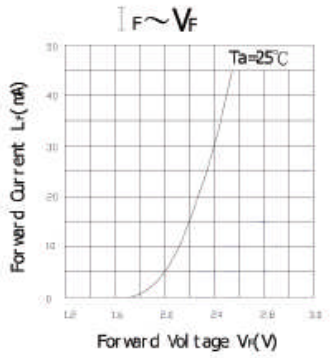
TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

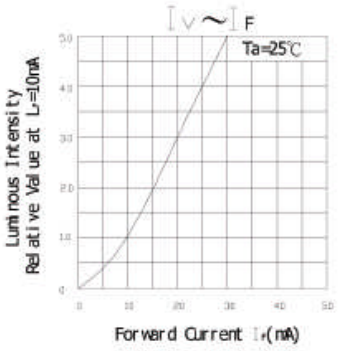
(25oC Ambient Temperature Unless Otherwise Noted)

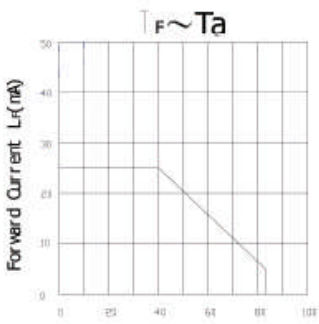
RELATIVE INTENSITY vs WAVELENGTH



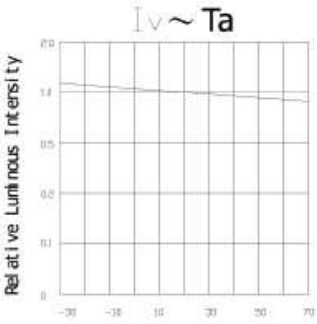
Wavel ength (nm)







Ambient Temperature Ta(^{O}C)



Ambient Temperature Ta(^{O}C)

THE CHIP ON BORAD OR SMT Reflow Soldering Instructions

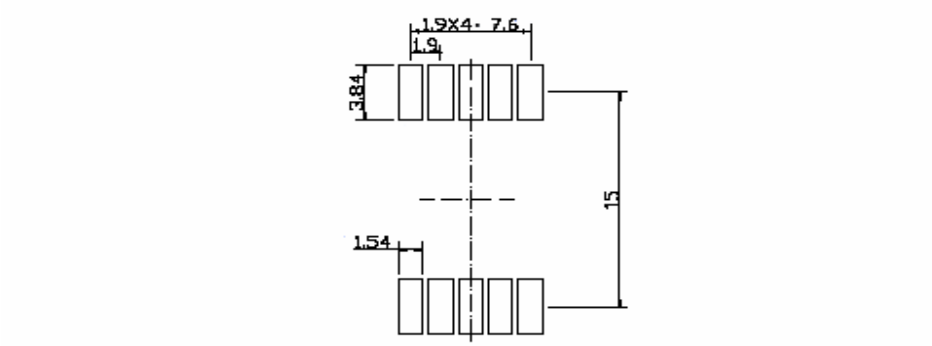
Number of reflow process shall be 2 times or less and cooling

Process to normal temperature is required berween first and

Second soldering process.

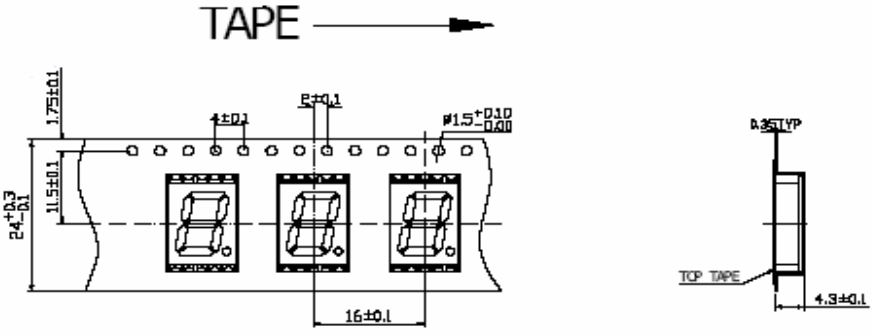
Recommended Soldering Pattern

(Units:mm)



Tape Specifications

(Units:mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follow:

1. Wavelength:+/-1nm

2. Luminous Intensity:+/-15%

3. Forward Voltage:+/-0.1V

Note: Accuracy may depend on the sorting parameters.