



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

**Part No.: NES-4012AB-11**

## **Features:**

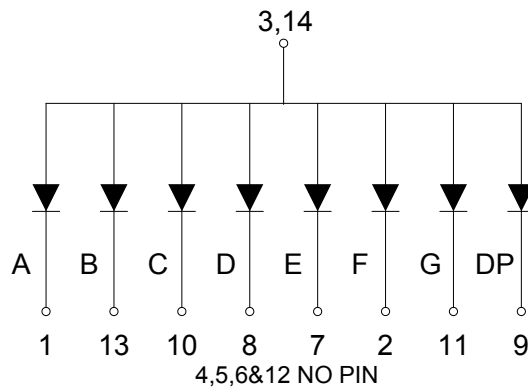
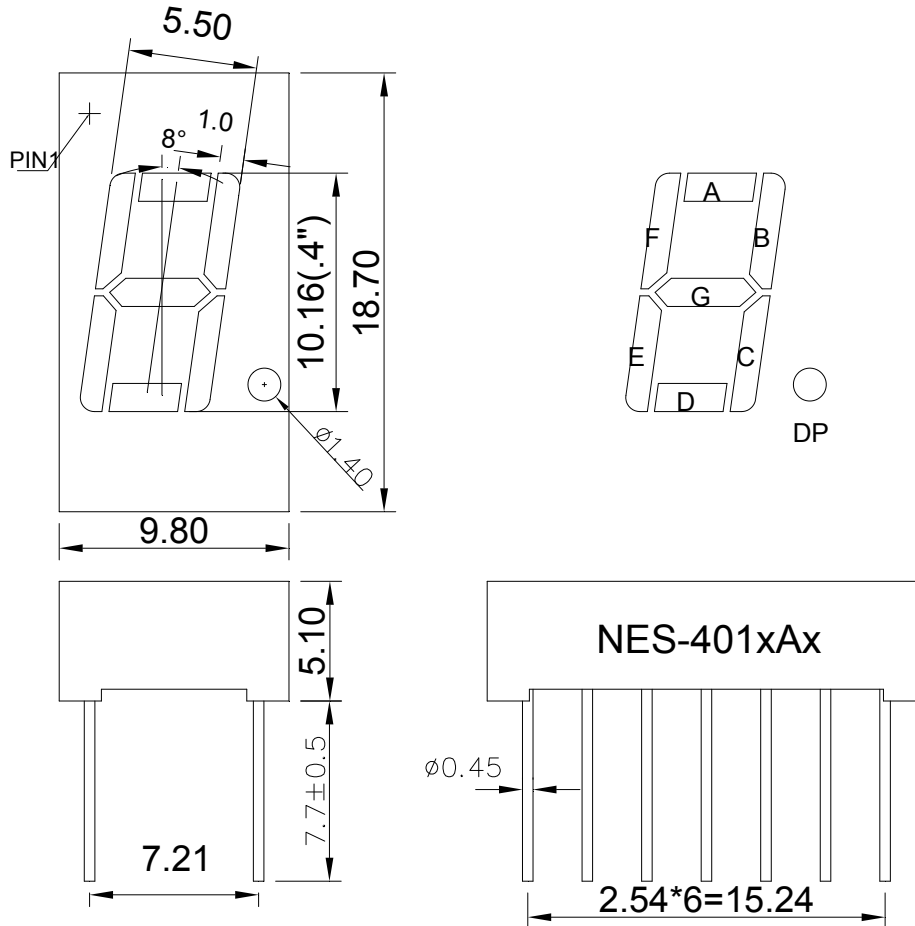
- Industrial standard size.
- Low current operation.
- Easy mounting on P.C. boards or sockets.
- I.C. compatible.
- Mechanically rugged.
- Pb free.
- RoHS compliant.

## **Descriptions:**

- The NES-401xAx series is a large 10.16mm (0.4") high seven segment display.
- These displays provide excellent reliability in bright ambient light.
- These devices are made with black surface and white segments.
- The Blue source color devices are made with InGaN Blue Light Emitting Diode.



Package Dimensions & Internal Circuit Diagram



Notes:

1. All dimensions are in millimeters(inches),Tolerance is  $\pm 0.25$  (0.01") unless otherwise noted.
2. Specifications are subject to change without notice.

**Absolute maximum ratings (Ta = 25°C)**

Parameter	Symbol		Value		Unit
			Min.	Max.	
Reverse Voltage	V <sub>R</sub>	----	----	5	V
Forward Current	I <sub>F</sub>	----	----	25	mA
Power Dissipation	P <sub>d</sub>	----	----	75	mW
Pulse Current	I <sub>peak</sub>	Duty=0.1mS, 1kHz	----	80	mA
Operating Temperature	T <sub>opr</sub>	----	-25	+85	°C
Storage Temperature	T <sub>str</sub>	----	-30	+85	°C
Solder Temperature	T <sub>sol</sub>	1/16inch below Seating plane	260/3		°C/s

**Electrical and optical characteristics (Ta = 25°C)**

Parameter	Symbol	Test Condition	Values			Unit
			Min.	Typ.	Max.	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	----	3.0	3.5	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	----	----	30	μA
Dominate Wavelength	λ <sub>d</sub>	I <sub>F</sub> =20mA	460	----	470	nm
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> =20mA	----	465	----	nm
Spectral Line half-width	Δλ	I <sub>F</sub> =20mA	----	30	----	nm
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> =10mA	----	12	----	mcd



Typical electrical/optical characteristic curves:

