



## 0.31"(8.00mm)Three Digit 7 Segment Display

### Features:

- \*High segment intensity
- \*Wide viewing angle
- \*Range of colors
- \*Black face White segment
- \*RoHS compliant

### Available option:

- \*Alternative face and segment color
- \*Alternative font
- \*Cropped terminal pins
- \*Available emitting color
- \*Low current version

### Electro/Optical Characteristics If=20mA Ta=25°C

Part Number Common Cathode	Part Number Common Anode	Emitting Color	Peak Wavelength	Forward Voltage V <sub>F</sub> /Seg.		Luminous Intensity I <sub>v</sub> /seg.	
				Typ.	Max.	Min.	Typ.
NFD-3131AH-11	NFD-3131BH-11	GaP/GaP Red	700	2.25	2.50	0.40	0.80
NFD-3131AS-11	NFD-3131BS-11	GaAlAs/GaAs SH Hi-Red	660	1.80	2.20	8.00	12.00
NFD-3131AD-11	NFD-3131BD-11	GaAlAs/GaAs DH Super Red	660	1.80	2.50	22.00	28.00
NFD-3131AE-11	NFD-3131BE-11	GaAsP/GaP Orange	632	2.10	2.50	8.00	12.00
NFD-3131AY-11	NFD-3131BY-11	GaAsP/GaP Yellow	585	2.10	2.50	4.00	7.00
NFD-3131AG-11	NFD-3131BG-11	GaP/GaP Green	570	2.20	2.50	7.00	11.00
Units			nm	V		mcd	

### Maximum Ratings Ta=25°C (Derate above 25°C)

Characteristic	Test Condition	Symbol	H	S	D	E	Y	G	Units
Pulse Forward Current Per Seg.	1/10 duty cycle 0.1ms Pulse width	I <sub>FP</sub>	50	100	100	100	100	100	mA
DC Forward Current Per Seg.		I <sub>F</sub>	15	25	25	30	30	30	mA
Reverse Current Per Seg.	V <sub>R</sub> =5V	I <sub>R</sub>	10	10	10	10	10	10	μA
Power Dissipation		P <sub>D</sub>	40*24	60*24	60*24	80*24	80*24	80*24	mW
Operating Temperature		T <sub>OPR</sub>	-40 to +80						°C
Storage Temperature		T <sub>TSG</sub>	-40 to +85						°C
Lead soldering temperature	1.60mm from body maximum 3 seconds		260						°C

Checked

Chen N.H.

Approved

Jason Chen

Date

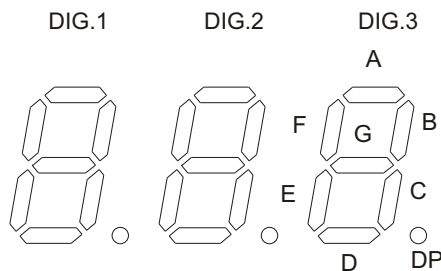
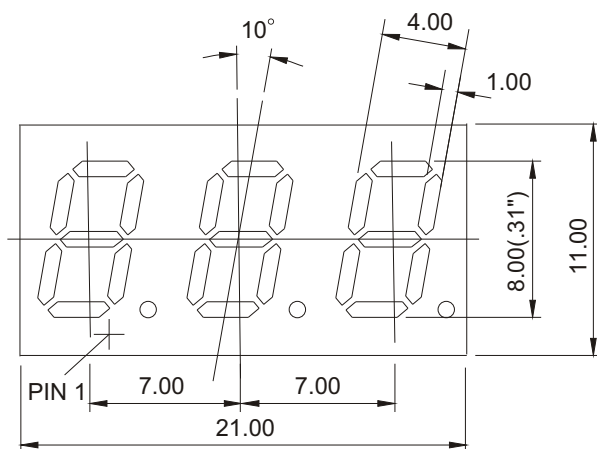
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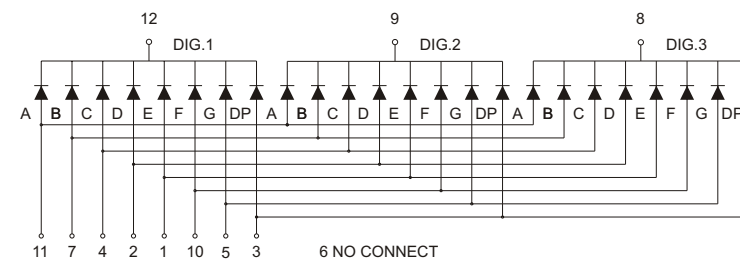
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### PACKAGE DIMENSION

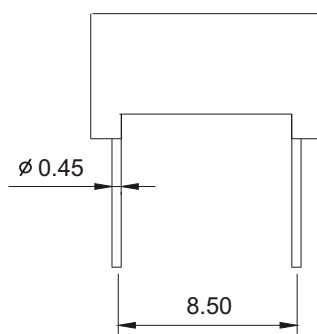
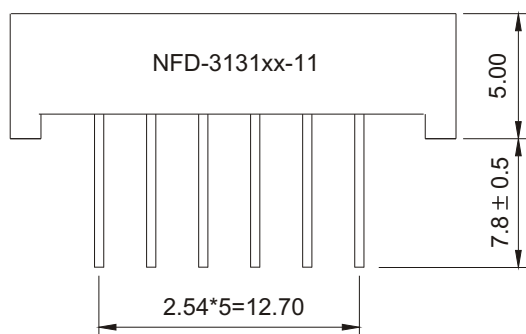
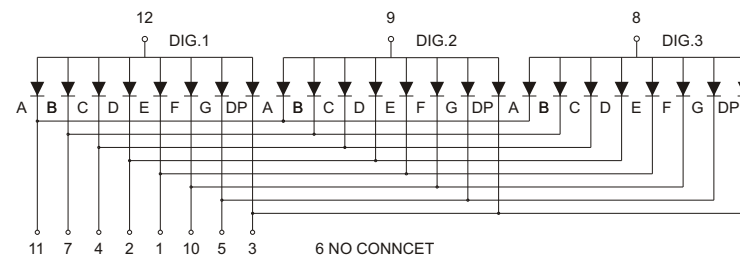


### INTERNAL CIRCUIT DIAGRAM

#### Common Cathode NFD-3131Ax



#### Common Anode NFD-3131Bx



Tolerance  $\pm 0.25\text{mm}$  unless stated

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