



## 1.00"(25.40mm)Single Digit 7 Segment Display

### Features:

- \*High segment intensity
- \*Wide viewing angle
- \*Range of colors
- \*Gray 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-10012CH-21	NFD-10012DH-21	GaP/GaP Red	700	2.25	2.50	0.40	0.80
NFD-10012CS-21	NFD-10012DS-21	GaAlAs/GaAs SH Hi-Red	660	1.80	2.20	8.00	12.00
NFD-10012CD-21	NFD-10012DD-21	GaAlAs/GaAs DH Super Red	660	1.80	2.20	22.00	28.00
NFD-10012CE-21	NFD-10012DE-21	GaAsP/GaP Orange	632	2.10	2.50	8.00	12.00
NFD-10012CY-21	NFD-10012DY-21	GaAsP/GaP Yellow	585	2.10	2.50	4.00	7.00
NFD-10012CG-21	NFD-10012DG-21	GaP/GaP Green	568	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*8	60*8	60*8	80*8	80*8	80*8	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

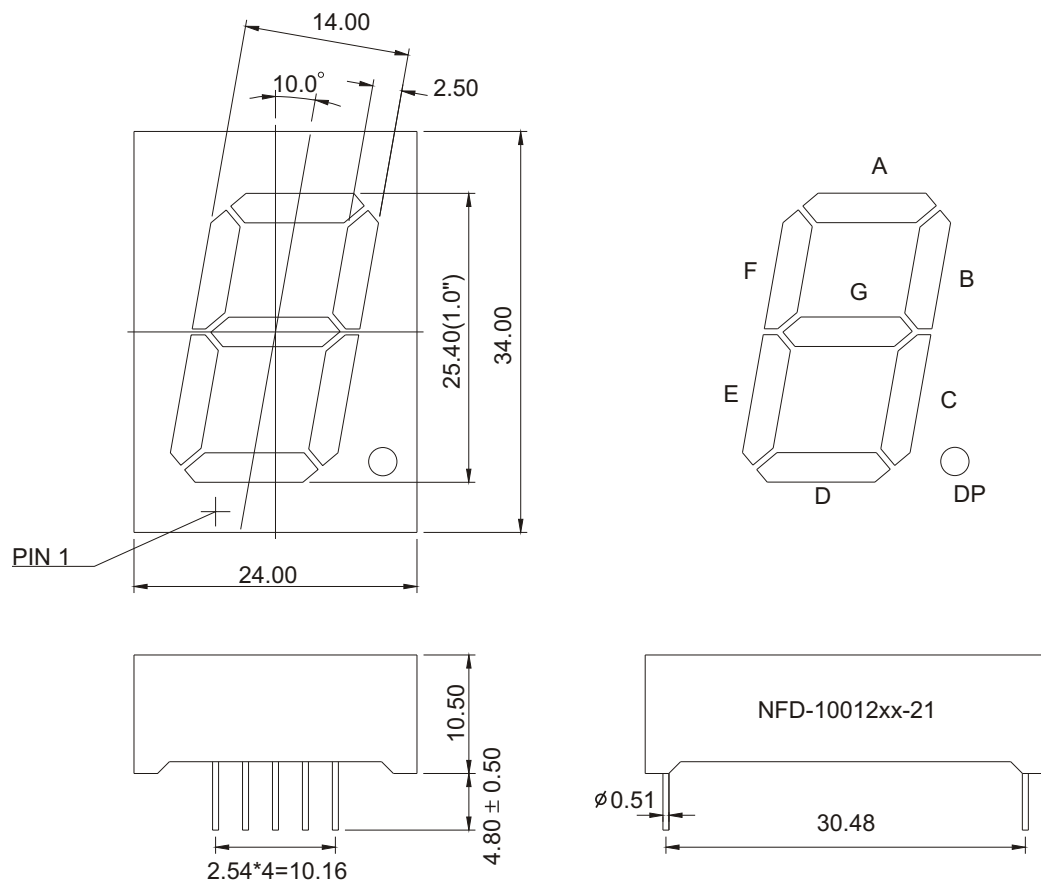
Dec/17/2006

PAGE 1 / 2



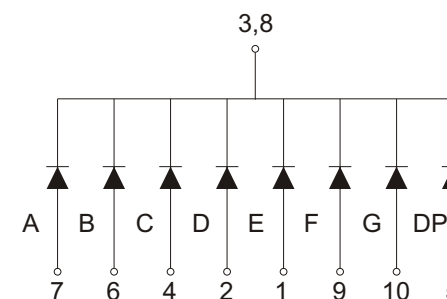
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## PACKAGE DIMENSION

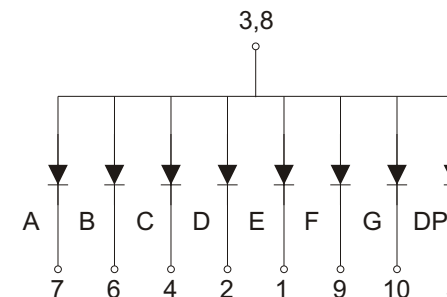


## INTERNAL CIRCUIT DIAGRAM

### Common Cathode NFD-10012Cx



### Common Anode NFD-10012Dx



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

Checked

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PAGE 2 / 2