



1.00"(25.40mm)Single Digit 7 Segment Display

Features:

- *Ultra 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 _F /Seg.(DP)		Luminous Intensity I _v /seg.(DP)	
				Typ.	Max.	Min.	Typ.
NFD-10012AUHR-21	NFD-10012BUHR-21	AlGaInP/GaAs Ultra Red	640	4.00(2.00)	5.00(2.50)	80.00 (40.00)	120.00(60.00)
NFD-10012AUE-21	NFD-10012BUE-21	AlGaInP/GaAs Ultra Orange	632	4.00(2.00)	5.00(2.50)	80.00 (40.00)	120.00(60.00)
NFD-10012AYO-21	NFD-10012BYO-21	AlGaInP/GaAs Ultra Amber	605	4.00(2.00)	5.00(2.50)	80.00 (40.00)	120.00(60.00)
NFD-10012AUY-21	NFD-10012BUY-21	AlGaInP/GaAs Ultra Yellow	590	4.00(2.00)	5.00(2.50)	80.00 (40.00)	120.00(60.00)
NFD-10012AUG-21	NFD-10012BUG-21	AlGaInP/GaAs Ultra Green	574	4.20(2.10)	5.00(2.50)	50.00 (25.00)	80.00 (40.00)
NFD-10012APG-21	NFD-10012BPG-21	InGaN/SiC Pure Green	525	6.60(3.30)	7.60(3.80)	300.00(150.00)	400.00(200.00)
NFD-10012AUB-21	NFD-10012BUB-21	InGaN/SiC Ultra Blue	470	6.60(3.30)	7.60(3.80)	80.00 (40.00)	200.00(100.00)
NFD-10012AUW-21	NFD-10012BUW-21	InGaN/SiC Ultra White	X-0.31/Y-0.31	6.60(3.30)	7.60(3.80)	400.00 (200.00)	1000.00(500.00)
Units			nm	V		mcd	

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

Characteristic	Test Condition	Symbol	UHR	UE	YO	UY	UG	PG	UB	UW	Units
Pulse Forward Current Per Seg.	1/10 duty cycle 0.1ms Pulse width	I _{FP}	100	100	100	100	100	100	100	100	mA
DC Forward Current Per Seg.		I _F	30	30	30	30	30	30	30	30	mA
Reverse Current Per Seg.	V _R =10V	I _R	10	10	10	10	10	10	10	10	μA
Power Dissipation		P _D	65*15	65*15	65*15	65*15	75*15	110*15	120*15	120*15	mW
Operating Temperature		T _{OPR}	-40 to +80								°C
Storage Temperature		T _{TSG}	-40 to +85								°C
Lead soldering temperature	1.60mm from body maximum 3 seconds		260								°C

Checked

Chen N.H.

Approved

Jason Chen

Date

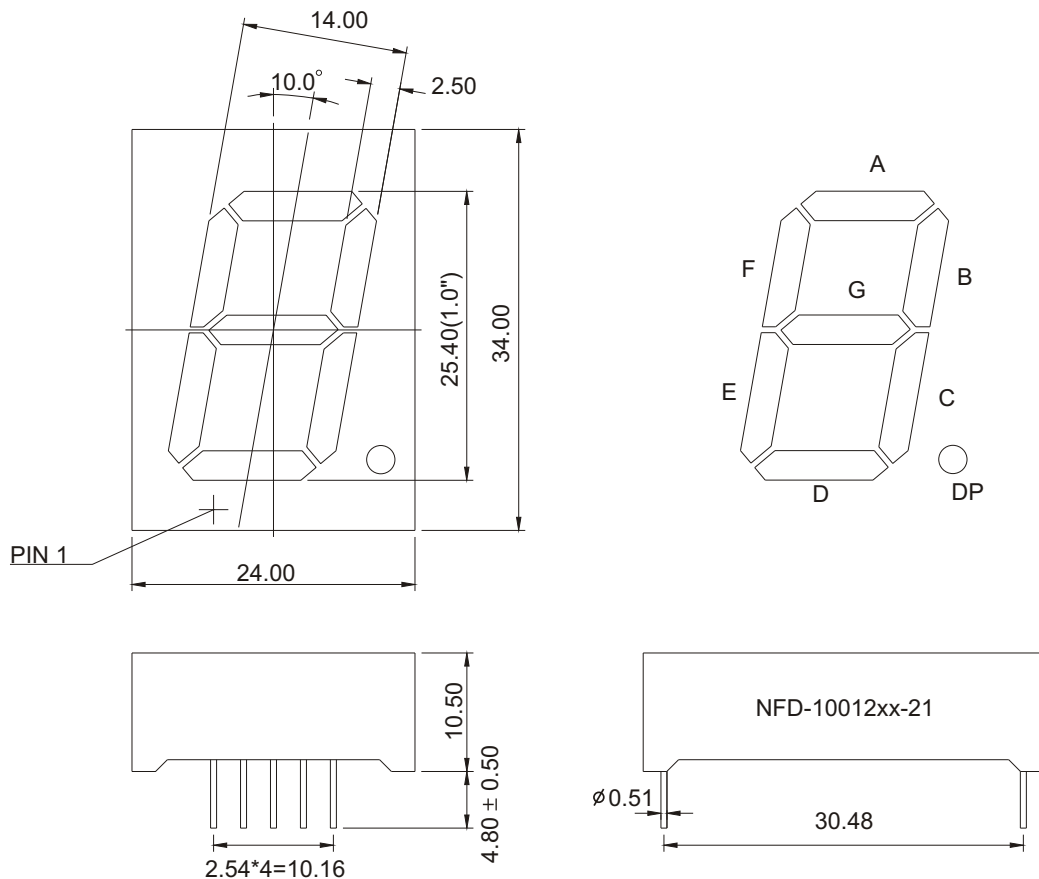
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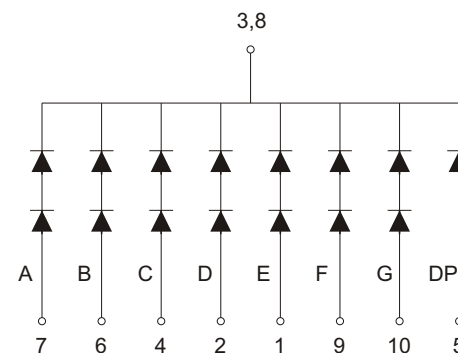
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PACKAGE DIMENSION

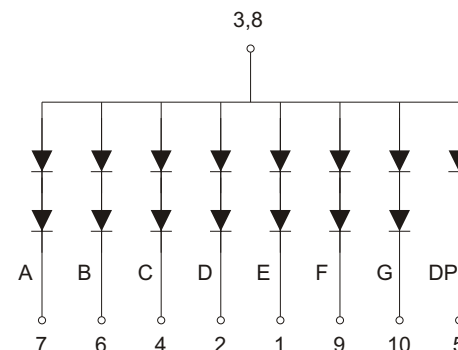


INTERNAL CIRCUIT DIAGRAM

Common Cathode NFD-10012Ax



Common Anode NFD-10012Bx



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

Checked

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