



## 2.30"(56.80mm)Single Digit Bi-Color 7 Segment Display

### Features:

- \*High segment intensity
- \*Wide viewing angle
- \*Range of colors
- \*White 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 Colors	Peak Wavelength	Forward Voltage V <sub>F</sub> /Seg.(DP)		Luminous Intensity I <sub>v</sub> /Seg.(DP)	
				Typ.	Max.	Min.	Typ.
NFD-23011CSG-11	NFD-23011DSG-11	GaAlAs/GaAs SH Hi-Red	660	7.20(3.60)	8.80(4.40)	32.00(16.00)	48.00(24.00)
		GaP/GaP Green	568	8.80(4.40)	10.00(5.00)	28.00(14.00)	44.00(22.00)
NFD-23011CEG-11	NFD-23011DEG-11	GaAsP/GaP Orange	632	8.40(4.20)	10.00(5.00)	32.00(16.00)	48.00(24.00)
		GaP/GaP Green	568	8.80(4.40)	10.00(5.00)	28.00(14.00)	44.00(22.00)
NFD-23011CUEUG-11	NFD-23011DUEUG-11	AlGaInP/GaAs Ultra Orange	632	8.00(4.00)	10.00(5.00)	160.0(80.0)	240.0(160.0)
		AlGaInP/GaAs Ultra Green	574	8.40(4.20)	10.00(5.00)	100.0(50.0)	160.0(80.0)
Units			nm	V		mcd	

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

Characteristic	Test Condition	Symbol	S	G	E	UE	UG	Units
Pulse Forward Current Per Seg.	1/10 duty cycle 0.1ms Pulse width	I <sub>FP</sub>	100	100	100	100	100	mA
DC Forward Current Per Seg.		I <sub>F</sub>	25	30	30	30	30	mA
Reverse Current Per Seg.	V <sub>R</sub> =10V	I <sub>R</sub>	10	10	10	10	10	μA
Power Dissipation		P <sub>D</sub>	60*30	80*30	80*30	65*30	75*30	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

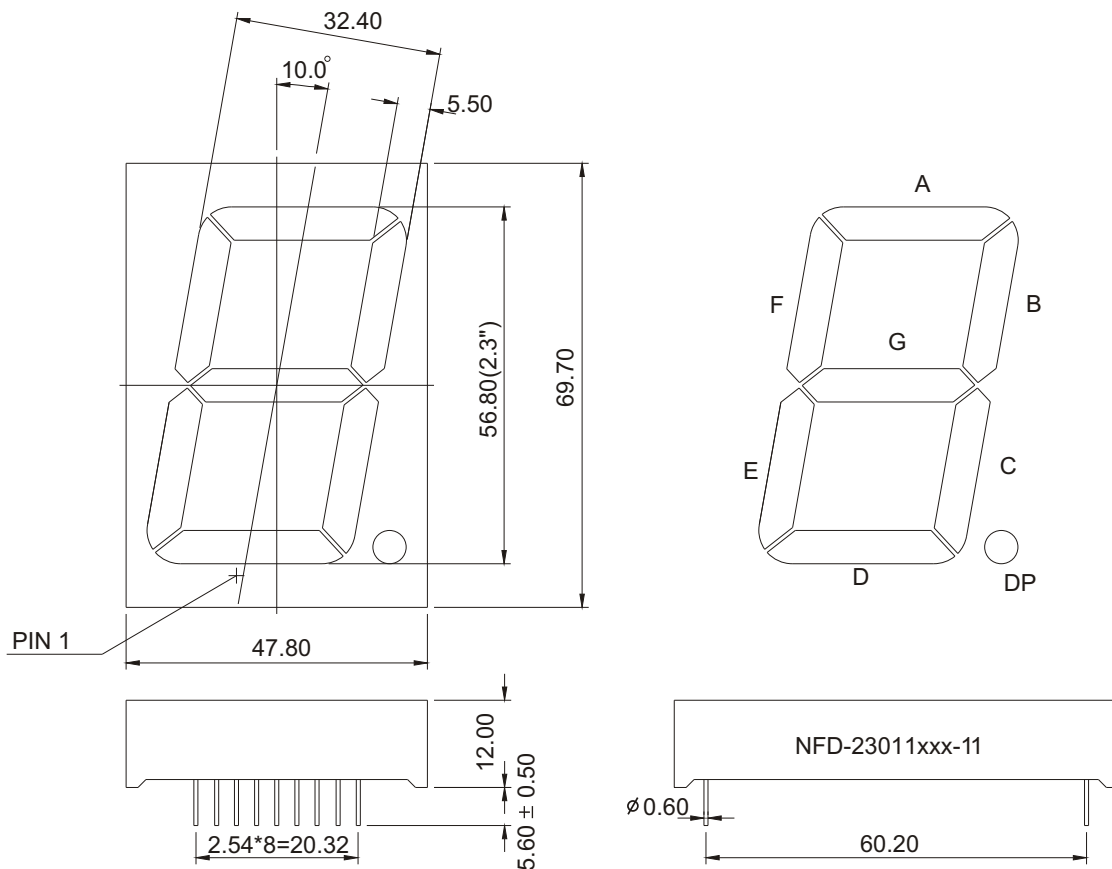
Dec/17/2006

PAGE 1 / 2



2.30"(56.80mm)Single Digit Bi-Color 7 Segment Display

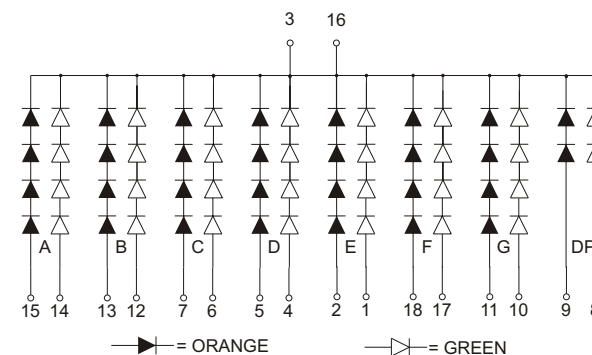
PACKAGE DIMENSION



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

INTERNAL CIRCUIT DIAGRAM

Common Cathode  
NFD-23011CEG



Common Anode  
NFD-23011DEG

