

# High Reliability 0.8-inch Dual-Color 7-Segment Numeric LED Displays

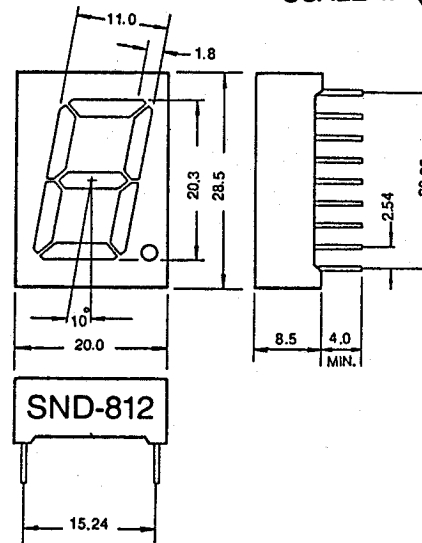
# SND-812 SND-819

## GENERAL DESCRIPTION

The SND-812 and SND-819 are high performance dual color 7 segment numeric LED displays of which character height 8.0 inch (20.3mm). A red and green chips are contained in each segment and it could be displayed in red or green color separately and appears in amber color when drive to red and green side in the same time.

## PACKAGE DIMENSIONS

SCALE 1:1 (mm)

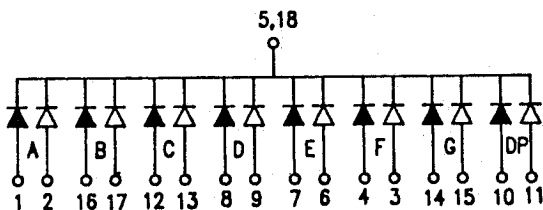
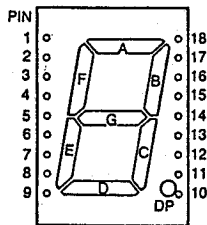


## FEATURES

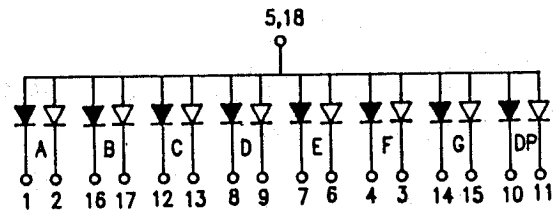
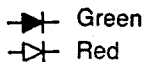
1. High brightness with high contrast
2. Uniform brightness and wide angle viewing
3. Low power consumption
4. Solid state stability and long operation life
5. Cathode common (SND-812) and anode common (SND-819) types available

## PIN ARRANGEMENT

(Top View)



SND-812 (Cathode Common)



SND-819 (Anode Common)

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## SND 812/819SR-UG (GaAsP/GaP-GaP)

### Orange SR SIDE (GaAsP/GaP)

Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Power dissipation/Total	320	mW
Power dissipation/Seg	40	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	$^\circ\text{C}$
Storage temperature	-55 ~ +100	$^\circ\text{C}$

Electrical/Optical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	$V_F$	$I_F = 10\text{mA}$	—	4.0	4.4	V
Reverse current/Seg	$I_R$	$V_R = 10\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_v$	$I_F = 10\text{mA}$	600	1200	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	635	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	—	35	—	nm

### Yellow-green UG SIDE (GaP)

Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Power dissipation/Total	320	mW
Power dissipation/Seg	40	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	4	V
Operating temperature	-25 ~ +85	$^\circ\text{C}$
Storage temperature	-55 ~ +100	$^\circ\text{C}$

Electrical/Optical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	$V_F$	$I_F = 10\text{mA}$	—	4.2	4.6	V
Reverse current/Seg	$I_R$	$V_R = 10\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_v$	$I_F = 10\text{mA}$	700	1500	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	565	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 10\text{mA}$	—	30	—	nm

\* Pulse Width . . . . . 1 ms  
Duty Cycle . . . . . 1/5

## ■ Characteristics Diagrams

