

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

# SND-832 SND-839

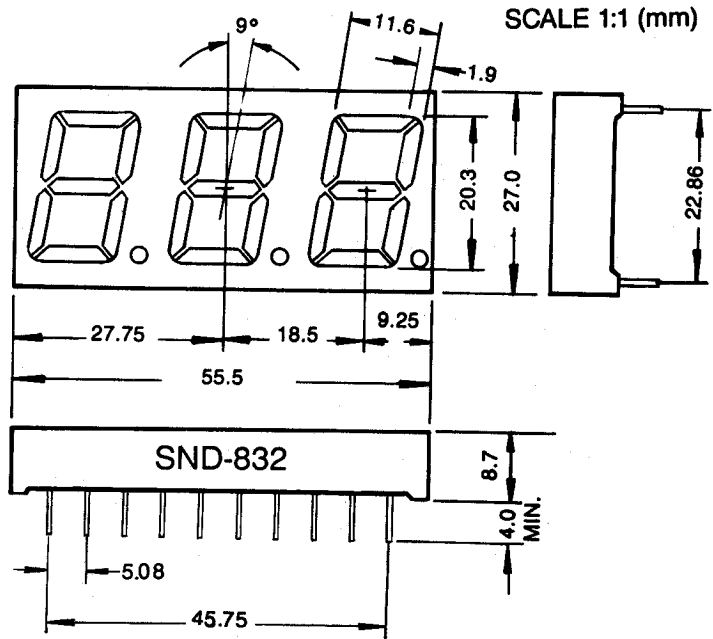
## GENERAL DESCRIPTION

The SND-832 and the SND-839 series are high performance epoxy resin molded 3-digit 7-segment dual color 7 segment numeric LED displays of which character height 0.8 inch (20.3 mm). A red and green chips are contained in each segment and it could be displayed in red or green color separately and also appears in amber color when drive to red and green in the same time.

## FEATURES

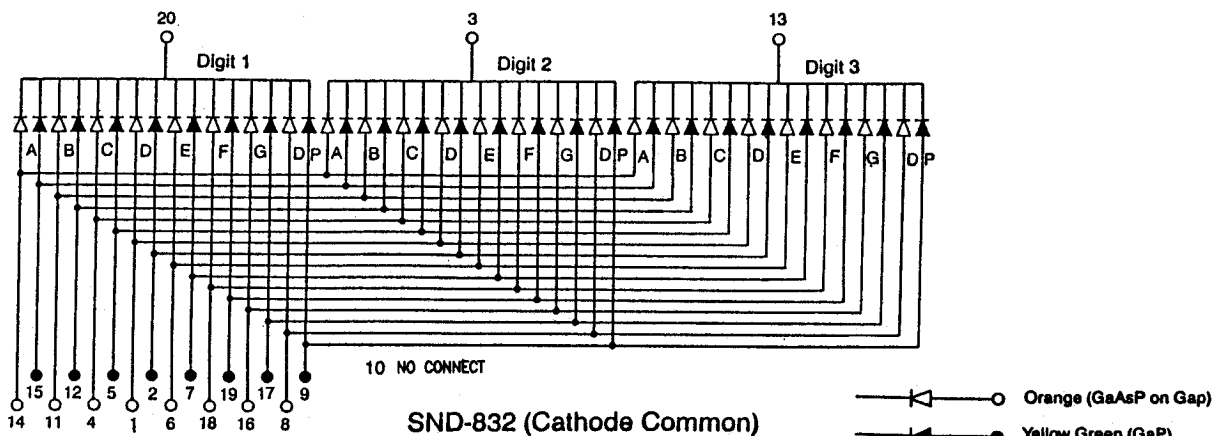
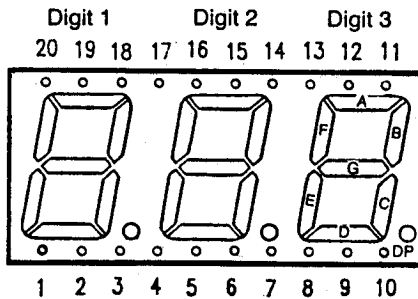
1. High brightness with high contrast
2. Uniform brightness and wide angle viewing
3. Low power consumption; Directly drive with I.C
4. Solid state reliability and long operation life
5. Cathode-common (SND-832) and anode-common (SND-839) types available

## PACKAGE DIMENSIONS



## CONNECTIONS GUIDE

(Top View)



SND-839 (Anode Common) All diodes are reversed polarity



### 三光半導體株式會社

## SAM KWANG SEMICONDUCTOR CO., LTD.

803 Silla Techno Vil., 39-3 Dang-dong Kunpo-City Kyungki-do, Korea,  
TEL:031-456-1444/1484, FAX:031-456-4224

## SND 832/839SR-UG (GaAsP/GaP-GaP)

### Orange SR SIDE (GaAsP/GaP)

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

Power dissipation/Total	960	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	$V_F$	$I_F = 10\text{mA}$	—	2.0	2.2	V
Reverse current/Seg	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_V$	$I_F = 10\text{mA}$	700	1500	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 10\text{mA}$	—	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	960	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	$V_F$	$I_F = 10\text{mA}$	—	2.1	2.3	V
Reverse current/Seg	$I_R$	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_V$	$I_F = 10\text{mA}$	600	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

