

# High Reliability 1.8-inch Triple-Digits Dual-Color 7-Segment Numeric LED Displays

## SND-1832 SND-1839

### GENERAL DESCRIPTION

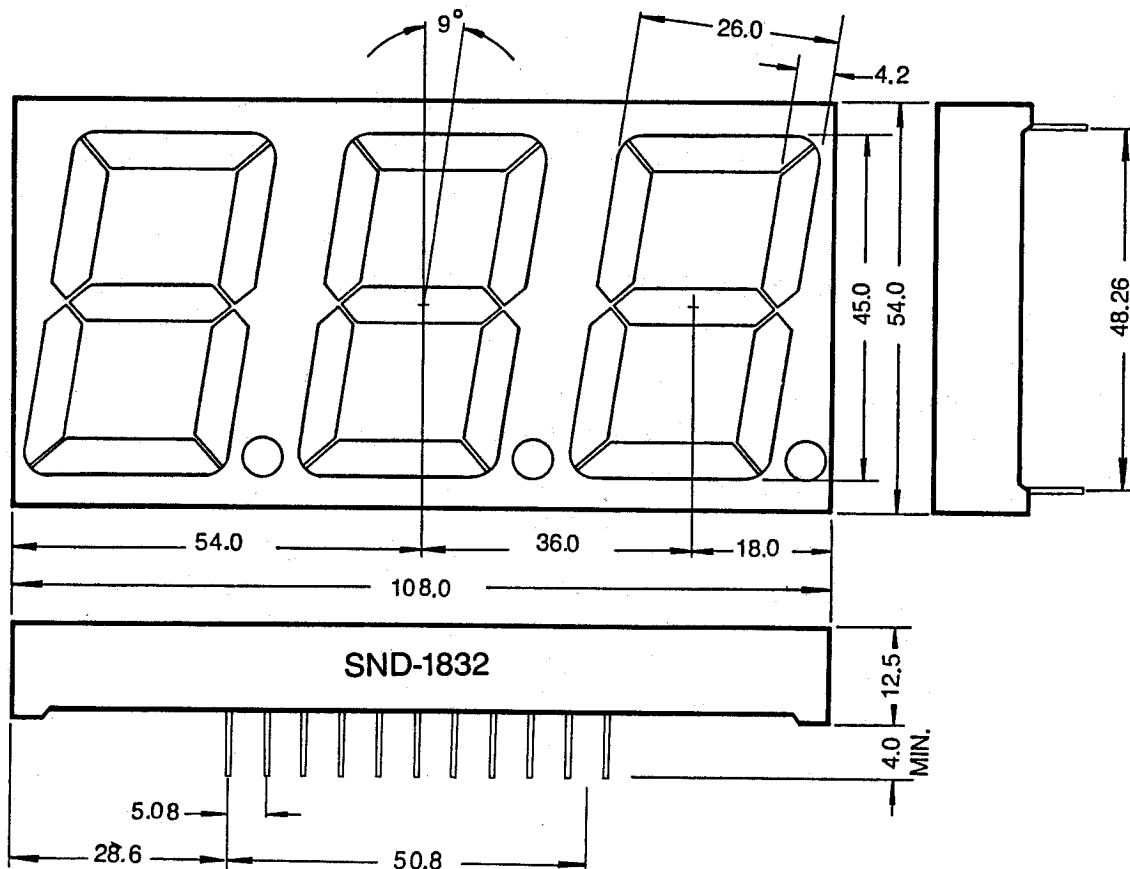
The SND-1832 and the SND-1839 series are high performance epoxy resin molded triple-digits dual color 7 segment numeric LED displays of which character height 1.8 inch (45.0 mm). Two red and green chips are contained in each segment and it could be displayed in red or green color separately and also 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-1832) and anode-common (SND-1839) types available

### PACKAGE DIMENSIONS

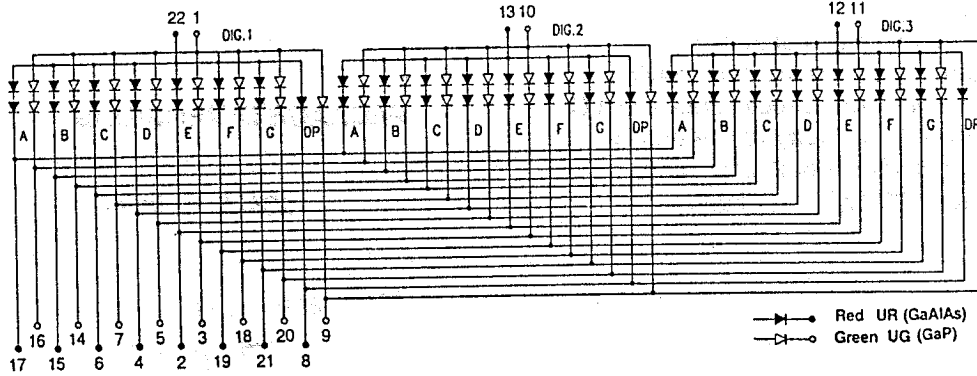
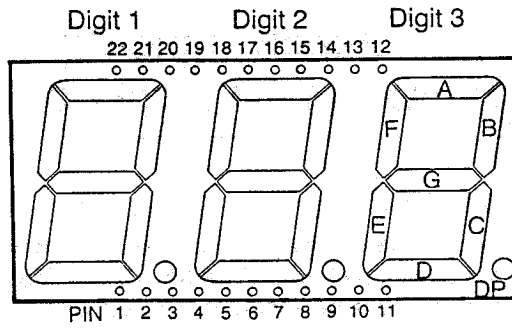
SCALE 1:1 (mm)



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**PIN ARRANGEMENT**  
(Top View)



SND-1839 (Anode Common)

SND-1832(Cathode Common) All diodes are reversed polarity

**SND 1832/1839UR-UG (GaAlAs-GaP)**

**Red UR SIDE (GaAlAs)**

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

Power dissipation/Total	1800	mW
Power dissipation/Seg	80	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	10	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	$V_F$	$I_F = 15\text{mA}$	—	3.8	4.0	V
Reverse current/Seg	$I_R$	$V_R = 10\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_v$	$I_F = 15\text{mA}$	450	1500	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 15\text{mA}$	—	660	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 15\text{mA}$	—	20	—	nm

**Yellow-green UG SIDE (GaP)**

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

Power dissipation/Total	1800	mW
Power dissipation/Seg	80	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	10	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	$V_F$	$I_F = 15\text{mA}$	—	6.3	6.9	V
Reverse current/Seg	$I_R$	$V_R = 15\text{V}$	—	—	10	$\mu\text{A}$
Luminous intensity/digit	$I_v$	$I_F = 15\text{mA}$	350	1000	—	$\mu\text{cd}$
Peak wavelength	$\lambda_P$	$I_F = 15\text{mA}$	—	565	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 15\text{mA}$	—	30	—	nm

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