

High Reliability 0.8-inch 5-Digits Dual-Color 7-Segment Numeric LED Displays

SND-852 SND-859

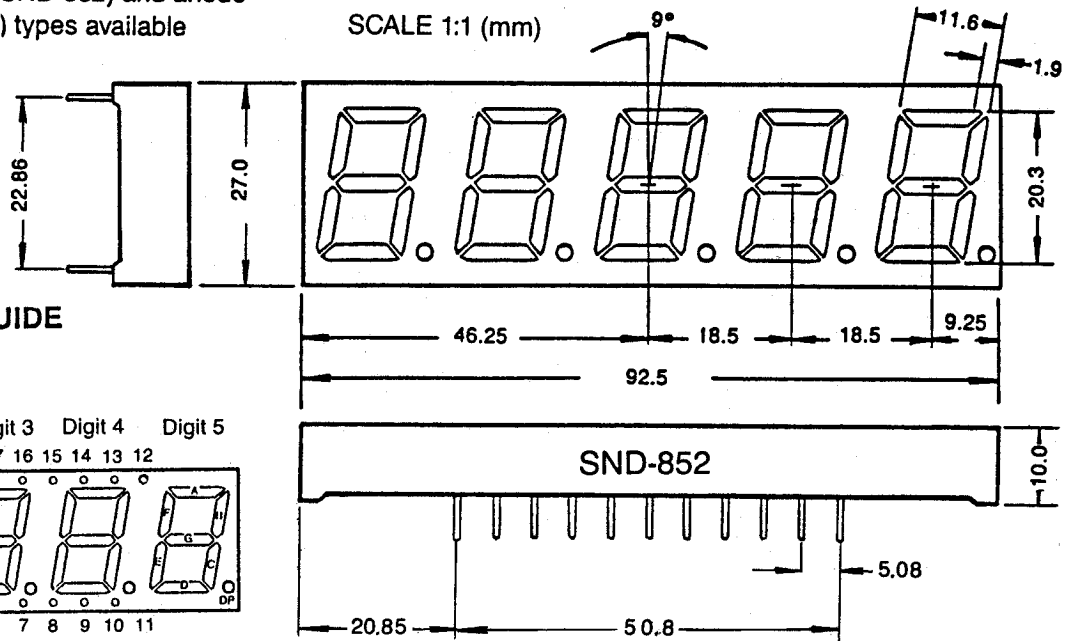
GENERAL DESCRIPTION

The SND-852 and the SND-859 series are high performance epoxy resin molded 5-digit 7-segment dual color 7 segment numeric LED displays of which character height 0.8 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 also appears in amber color when drive to red and green in the same time.

FEATURES

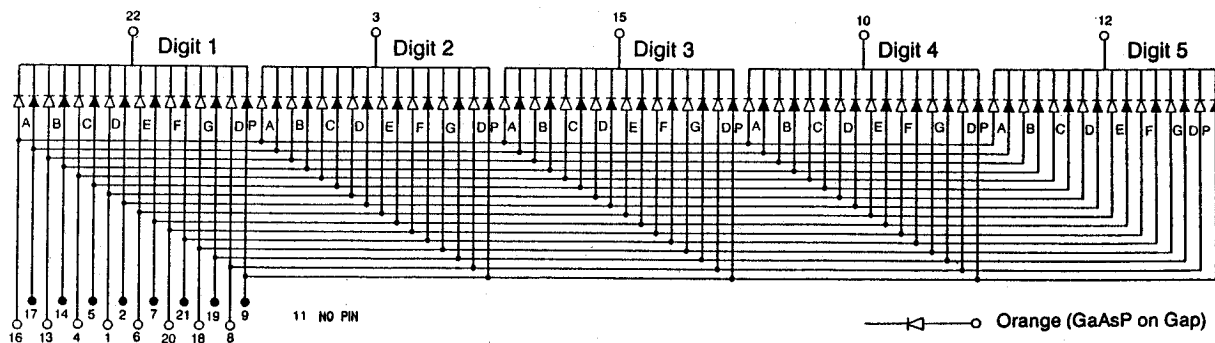
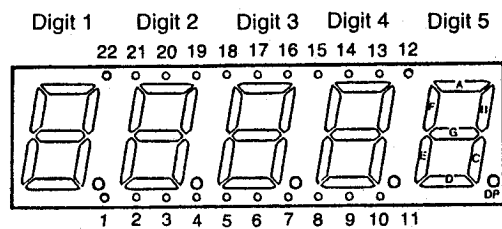
1. High brightness with high contrast
2. Uniform brightness and wide angle viewing
3. Low power consumption; Directly drive with I.C
4. Solid state reliability and long operation life
5. Cathode-common (SND-852) and anode-common (SND-859) types available

PACKAGE DIMENSIONS



CONNECTIONS GUIDE

(Top View)



SND-852 (Cathode Common)

SND-859 (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 852/859SR-UG (GaAsP/GaP-GaP)

Orange SR SIDE (GaAsP/GaP)

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

Power dissipation/Total	1600	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	μA
Luminous intensity/digit	I_v	$I_F = 10\text{mA}$	700	1500	—	μcd
Peak wavelength	λ_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	1600	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	μA
Luminous intensity/digit	I_v	$I_F = 10\text{mA}$	600	1500	—	μcd
Peak wavelength	λ_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

