

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

SND-1822 SND-1829

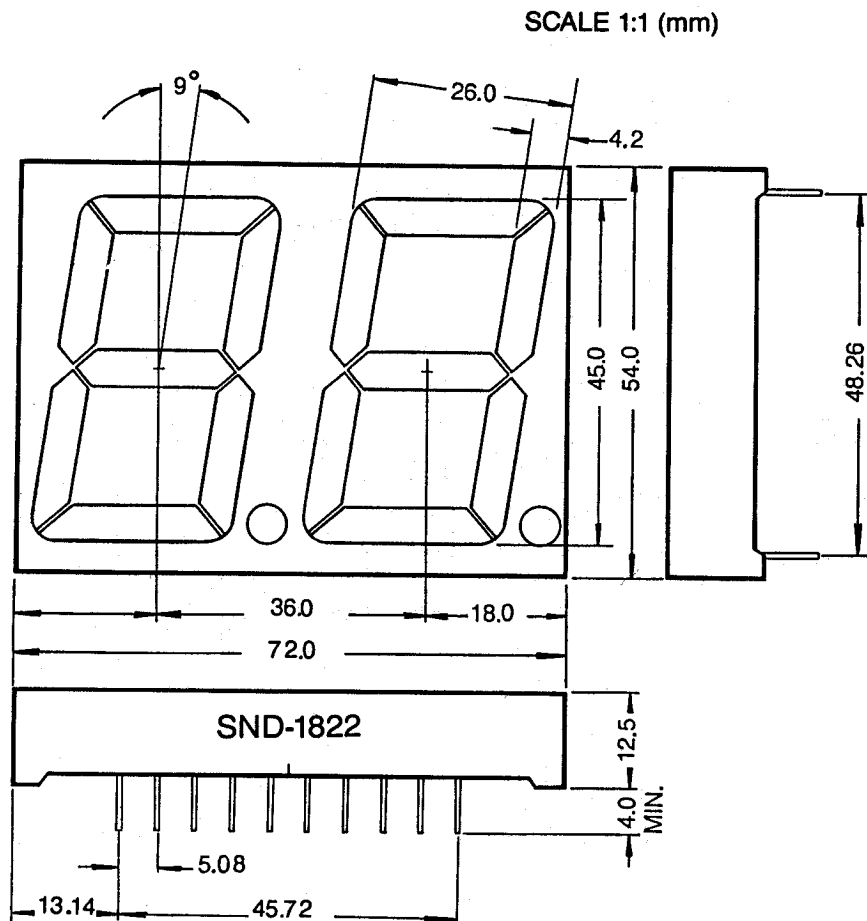
GENERAL DESCRIPTION

The SND-1822 and the SND-1829 series are high performance epoxy resin molded dual-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
4. Solid state stability and long operation life
5. Cathode-common (SND-1820) and anode-common (SND-1829) types available

PACKAGE DIMENSIONS



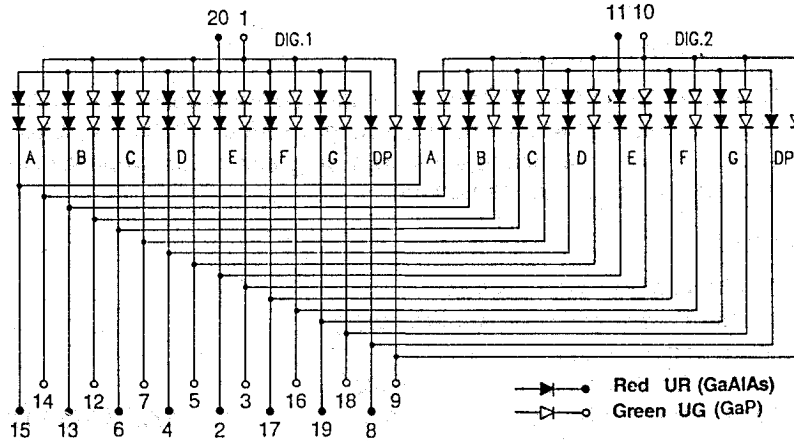
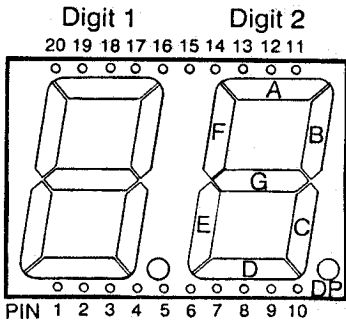
三光半導體株式會社

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

PIN CONNECTIONS

(Top View)



SND-1829 (Anode Common)

SND-1822 (Cathode Common) All diodes are reversed polarity

SND 1822/1829UR-UG (GaAlAs-GaP)

Red UR SIDE (GaAlAs)

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

Power dissipation/Total	1200	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	μA
Luminous intensity/digit	I_v	$I_F = 15\text{mA}$	450	1500	—	μcd
Peak wavelength	λ_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	1200	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	$I_F = 15\text{mA}$	—	4.3	4.6	V
Reverse current/Seg	I_R	$V_R = 10\text{V}$	—	—	10	μA
Luminous intensity/digit	I_v	$I_F = 15\text{mA}$	350	1000	—	μcd
Peak wavelength	λ_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