

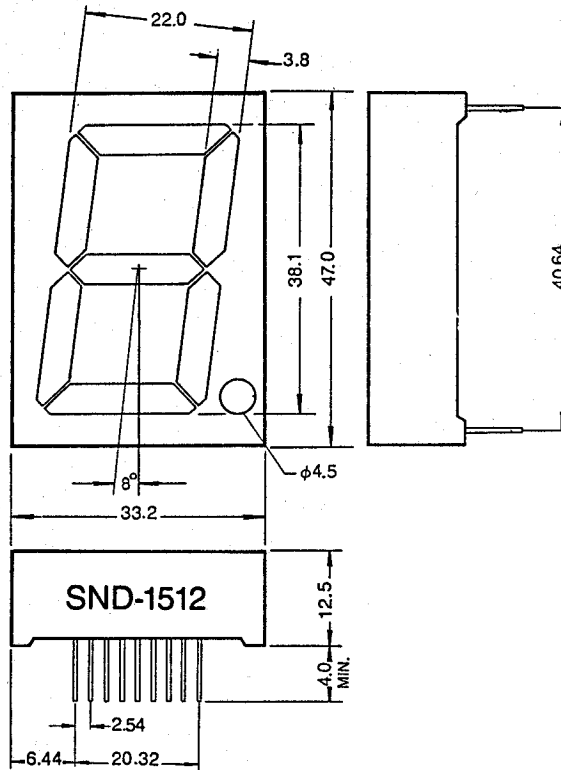
# High Reliability 1.5-inch Dual-Color 7-Segment Numeric LED Displays

# SND-1512 SND-1519

## GENERAL DESCRIPTION

The SND-1512 and SND-1519 are high performance dual color 7 segment numeric LED displays of which character height 1.5 inch (38.1 mm). Two 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

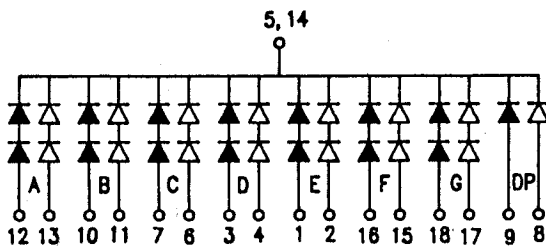
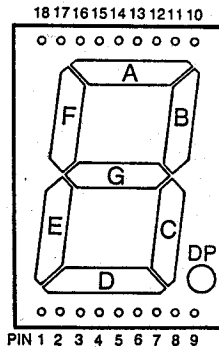


## FEATURES

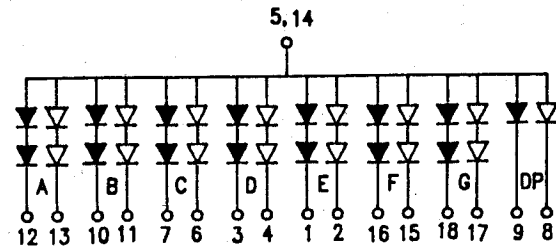
1. High brightness with high contrast
2. Uniform brightness and wide angle viewing
3. Low power consumption
4. Solid state stability and long operation life
5. Cathode common (SND-1512) and anode common (SND-1519) types available

## PIN ARRANGEMENT

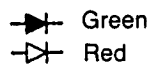
(Top View)



SND-1512 (Cathode Common)



SND-1519 (Anode Common)



**三光半導体株式会社**  
**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 1512/1519SR-UG (GaAsP/GaP-GaP)

### Orange SR SIDE (GaAsP/GaP)

#### Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

Power dissipation/Total	600	mW
Power dissipation/Seg	80	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	10	V
Operating temperature	- 25 ~ + 85	°C
Storage temperature	- 55 ~ + 100	°C

#### Electrical/Optical Characteristics (T<sub>a</sub> = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V <sub>F</sub>	I <sub>F</sub> = 15mA	—	4.2	4.4	V
Reverse current/Seg	I <sub>R</sub>	V <sub>R</sub> = 10V	—	—	10	μA
Luminous intensity/digit	I <sub>v</sub>	I <sub>F</sub> = 15mA	300	800	—	μcd
Peak wavelength	λ <sub>P</sub>	I <sub>F</sub> = 15mA	—	635	—	nm
Spectral line halfwidth	Δλ	I <sub>F</sub> = 15mA	—	35	—	nm

### Yellow-green UG SIDE (GaP)

#### Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

Power dissipation/Total	600	mW
Power dissipation/Seg	80	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	10	V
Operating temperature	- 25 ~ + 85	°C
Storage temperature	- 55 ~ + 100	°C

#### Electrical/Optical Characteristics (T<sub>a</sub> = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V <sub>F</sub>	I <sub>F</sub> = 15mA	—	4.3	4.6	V
Reverse current/Seg	I <sub>R</sub>	V <sub>R</sub> = 10V	—	—	10	μA
Luminous intensity/digit	I <sub>v</sub>	I <sub>F</sub> = 15mA	350	1000	—	μcd
Peak wavelength	λ <sub>P</sub>	I <sub>F</sub> = 15mA	—	565	—	nm
Spectral line halfwidth	Δλ	I <sub>F</sub> = 15mA	—	30	—	nm

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