

High Brightness 1.8-inch Dual-Color 7-Segment Numeric LED Displays

SND-1812 SND-1819

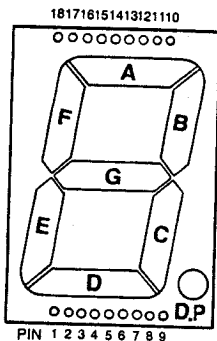
GENERAL DESCRIPTION

The SND-1812 and the SND-1819 are a high performance epoxy resin molded single-digits dual color 7 segment numeric LED displays of which character height 1.8 inch (45.0mm). Three 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.

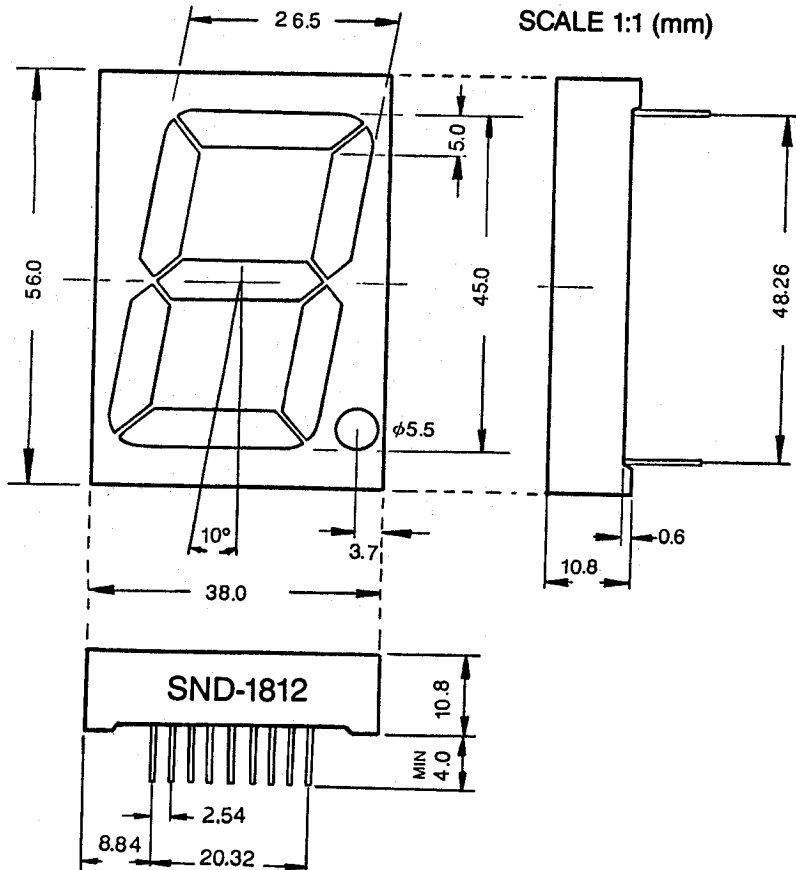
FEATURES

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-1812) and anode-common (SND-1819) types available

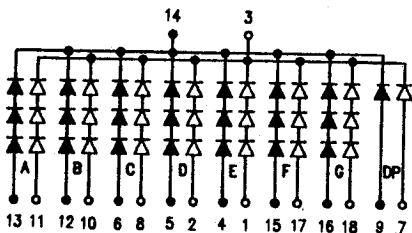
PIN ARRANGEMENT (Top View)



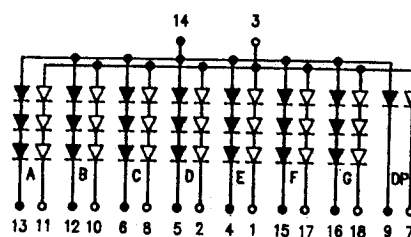
PACKAGE DIMENSIONS



= ORANGE
 = GREEN



SND-1812 (Cathode Common)



SND-1819 (Anode Common)

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SND 1812/1819SR-UG (GaAsP/GaP-GaP)

Orange SR SIDE (GaAsP/Gap)

Absolute Maximum Ratings (T_a = 25°C)

Power dissipation/Total	880	mW
Power dissipation/Seg	120	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	15	V
Operating temperature	-25 ~ +85	°C
Storage temperature	-55 ~ +100	°C

Electrical/Optical Characteristics (T_a = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V _F	I _F = 15mA	—	6.0	6.6	V
Reverse current/Seg	I _R	V _R = 15V	—	—	10	μA
Luminous Intensity/digit	I _v	I _F = 15mA	300	800	—	μcd
Peak wavelength	λ _P	I _F = 15mA	—	635	—	nm
Spectral line halfwidth	Δλ	I _F = 15mA	—	35	—	nm

Yellow-green UG SIDE (GaP)

Absolute Maximum Ratings (T_a = 25°C)

Power dissipation/Total	880	mW
Power dissipation/Seg	120	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	15	V
Operating temperature	-25 ~ +85	°C
Storage temperature	-55 ~ +100	°C

Electrical/Optical Characteristics (T_a = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V _F	I _F = 15mA	—	6.3	6.9	V
Reverse current/Seg	I _R	V _R = 15V	—	—	10	μA
Luminous Intensity/digit	I _v	I _F = 15mA	350	1000	—	μcd
Peak wavelength	λ _P	I _F = 15mA	—	565	—	nm
Spectral line halfwidth	Δλ	I _F = 15mA	—	30	—	nm

* Pulse Width 1 ms
Duty Cycle 1/5