

High Reliability 0.4-inch 5-Digits 7-Segment Numeric Displays

SND-450B SND-457B

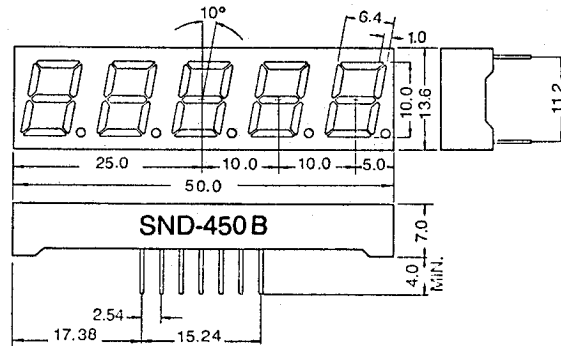
GENERAL DESCRIPTION

The SND-450B and the SND-457B series are high performance epoxy resin molded 5-digit 7-segment LED displays of which character height is 0.4-inch (10.0 mm) and available in red, green, orange and yellow-green emitting colors. The standard units are constructed with black face and milky white segment color.

PACKAGE DIMENSIONS



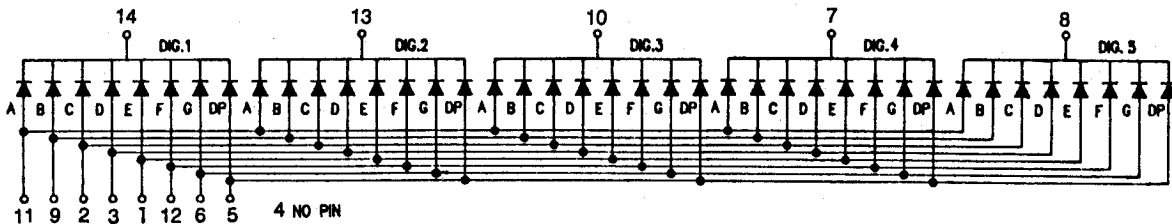
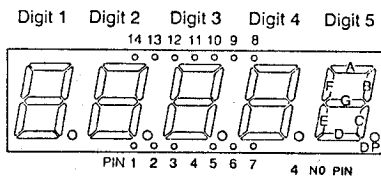
SCALE 1:1 (mm)



FEATURES

1. High brightness and high contrast
2. Low power consumption; Directly drive with I.C
3. Wide angle viewing
4. Solid state reliability; Long operation life
5. Cathode-common (SND-450B) and anode-common (SND-457B) types available

PIN ARRANGEMENT (Top View)



SND-450B (Cathode Common)

SND-457B (Anode Common) All diodes are reversed polarity



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

Red SND 450B/457BR (GaP)

Absolute Maximum Ratings (T_a=25°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	°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 = 10mA	—	2.1	2.3	V
Reverse current/Seg	I _R	V _R = 4V	—	—	10	μA
Luminous Intensity/digit	I _v	I _F = 10mA	300	800	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	700	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	100	—	nm

Green SND 450B/457BG (GaP)

Absolute Maximum Ratings (T_a=25°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	°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 = 10mA	—	2.1	2.3	V
Reverse current/Seg	I _R	V _R = 4V	—	—	10	μA
Luminous Intensity/digit	I _v	I _F = 10mA	350	900	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	555	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	30	—	nm

Orange SND 450B/457BSR (GaAsP/GaP)

Absolute Maximum Ratings (T_a=25°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	°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 = 10mA	—	2.0	2.2	V
Reverse current/Seg	I _R	V _R = 4V	—	—	10	μA
Luminous intensity/digit	I _v	I _F = 10mA	700	1500	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	635	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	35	—	nm

Yellow-green SND 450B/457BUG (GaP)

Absolute Maximum Ratings (T_a=25°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	°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 = 10mA	—	2.1	2.3	V
Reverse current/Seg	I _R	V _R = 4V	—	—	10	μA
Luminous intensity/digit	I _v	I _F = 10mA	600	1500	—	μcd
Peak wavelength	λ _P	I _F = 10mA	—	565	—	nm
Spectral line halfwidth	Δλ	I _F = 10mA	—	30	—	nm

* Pulse Width 1 ms
Duty Cycle 1/5