High Brightness 4.0-inch 7-Segment Numeric LED Displays

SND-4010 SND-4017

GENERAL DESCRIPTION

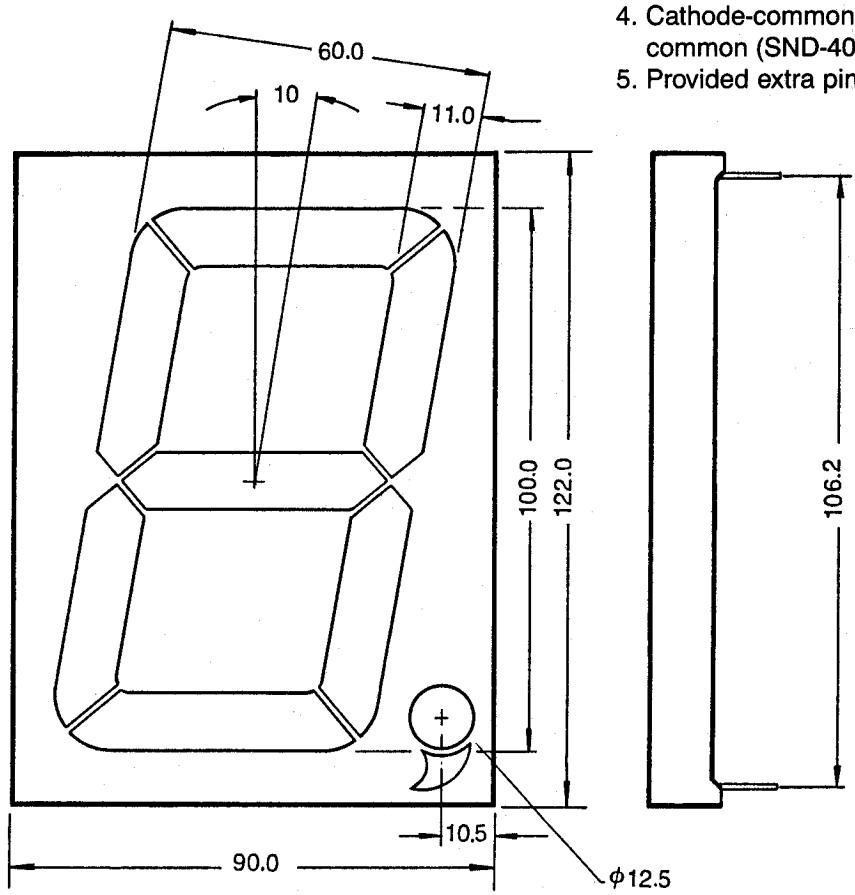
The SND-4010 and SND-4017 series are a high reliability epoxy resin molded large 7 segment numeric LED displays which character height is 4.0 inch (100mm) and available in ultra red and yellow-green emitting colors. There is a choice of two configurations; 5 chips in series per segment for an economical grade and 10 chips connected in parallel-series per segment for a special unit.

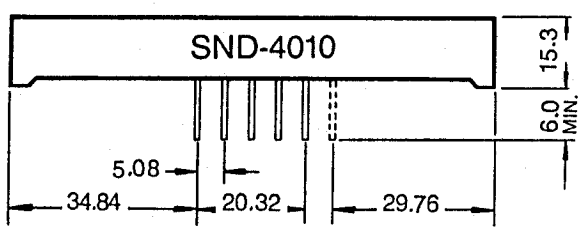
FEATURES

1. High brightness with high contrast
2. Uniform brightness and wide angle viewing
3. Solid state stability and long operation life
4. Cathode-common (SND-4010) and anode common (SND-4017) types available.
5. Provided extra pin 5A for comma.

PACKAGE DIMENSIONS

SCALE 7/10 (mm)

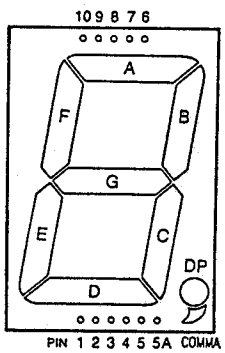


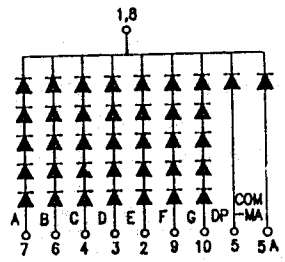


三光半導体株式會社
SAM KWANG SEMICONDUCTOR CO.,LTD.
803 Silla Techno Vil., 39-3 Dang-dong Kunpo-City Kyungki-do, Korea,
TEL:031-456-1444/1484, FAX:031-456-4224

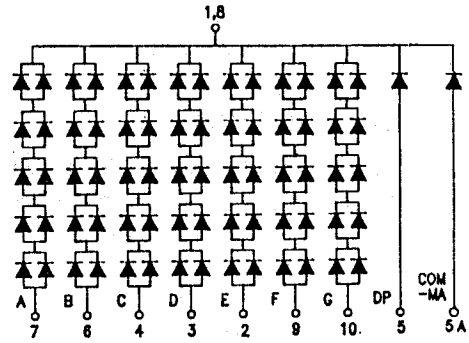
PIN ARRANGEMENTS

(Top View)





SND-4010 (Cathode Common)



SND-4010-2 (Cathode Common)

SND-4017/SND-4017-2 (Anode Common) All diodes are reversed polarity

Red SND 4010/4017UR (GaAlAs)

Absolute Maximum Ratings (T_a=25°C)

Power dissipation/Total	1480	mW
Power dissipation/Seg	200	mW
Forward current	20	mA
Peak forward current	60*	mA
Reverse voltage	25	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	—	9.0	10.0	V
Reverse current/Seg	I_R	V_R=25V	—	—	10	μA
Luminous intensity/digit	I_V	I_F =15mA	700	1500	—	μcd
Peak wavelength	λ_P	I_F =15mA	—	660	—	nm
Spectral line halfwidth	$\Delta\lambda$	I_F =15mA	—	20	—	nm

Orange SND 4010SR2/4017SR2 (GaAsP/GaP)

Absolute Maximum Ratings (T_a=25°C)

Power dissipation/Total	2880	mW
Power dissipation/Seg	400	mW
Forward current	40	mA
Peak forward current	120*	mA
Reverse voltage	25	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 =30mA	—	10.0	11.0	V
Reverse current/Seg	I_R	V_R=25V	—	—	20	μA
Luminous intensity/digit	I_V	I_F =30mA	400	1200	—	μcd
Peak wavelength	λ_P	I_F =30mA	—	635	—	nm
Spectral line halfwidth	$\Delta\lambda$	I_F =30mA	—	35	—	nm

Yellow-green SND 4010UG2/4017UG2 (GaP)

Absolute Maximum Ratings (T_a=25°C)

Power dissipation/Total	2880	mW
Power dissipation/Seg	400	mW
Forward current	40	mA
Peak forward current	120*	mA
Reverse voltage	25	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 =30mA	—	10.5	11.5	V
Reverse current/Seg	I_R	V_R=25V	—	—	20	μA
Luminous intensity/digit	I_V	I_F =30mA	500	1300	—	μcd
Peak wavelength	λ_P	I_F =30mA	—	565	—	nm
Spectral line halfwidth	$\Delta\lambda$	I_F =30mA	—	30	—	nm

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