

High Brightness 2.3-inch 7-Segment Numeric LED Displays

SND-2310
SND-2317

GENERAL DESCRIPTION

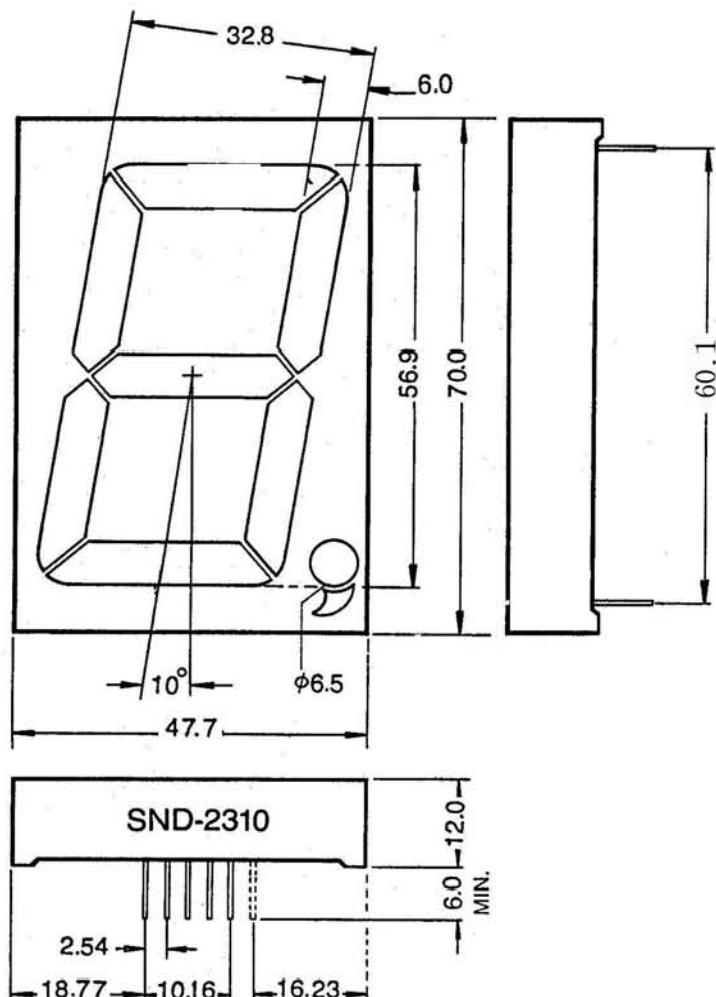
The SND-2310 and SND-2317 series are high reliability epoxy resin molded large 7 segment numeric LED displays which character height is 2.3 inch (56.9 mm) and available in red, orange and yellow-green emitting colors. The standard units are constructed with black face and milky white segment color.

PACKAGE DIMENSIONS

SCALE 1:1 (mm)

FEATURES

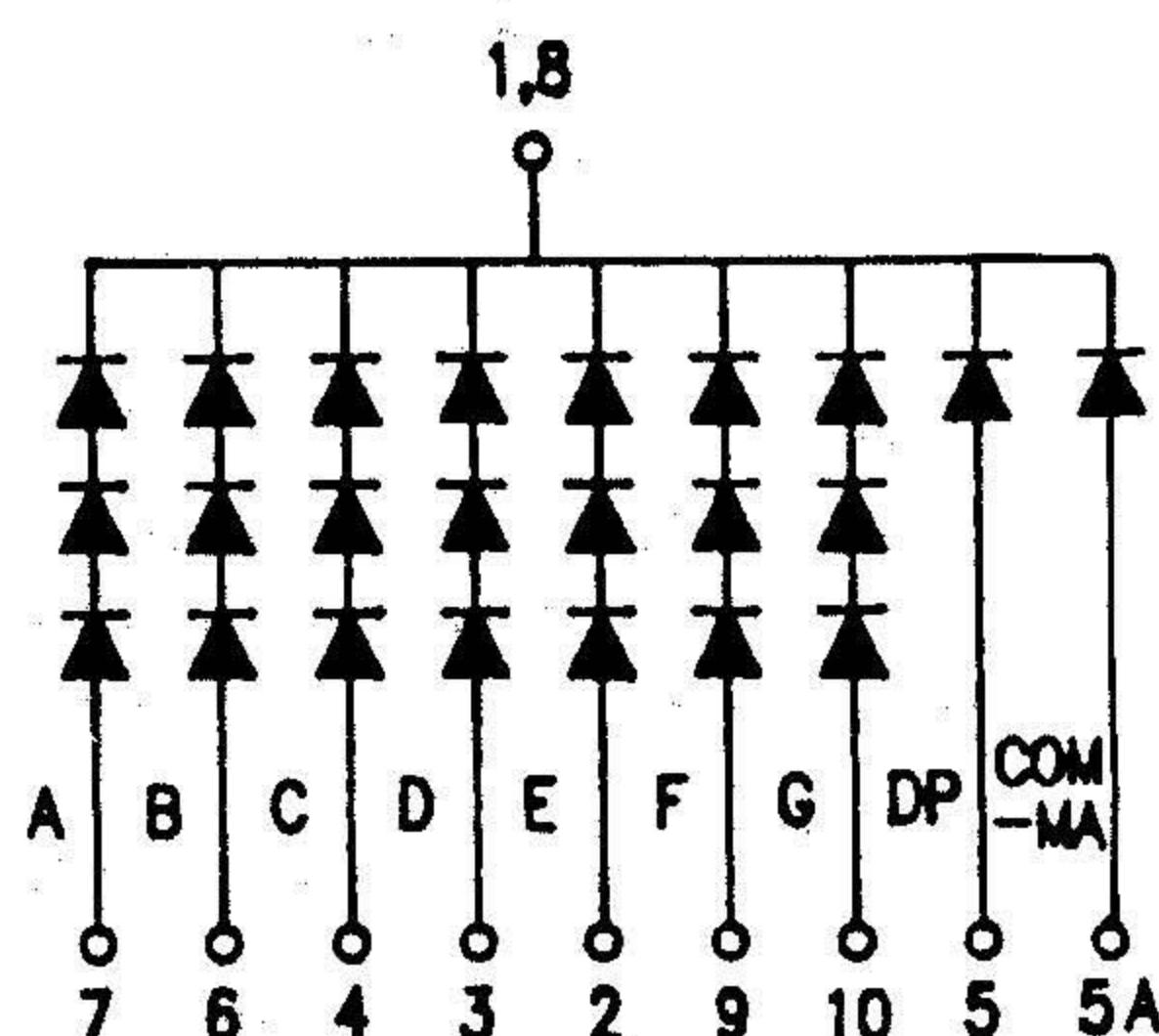
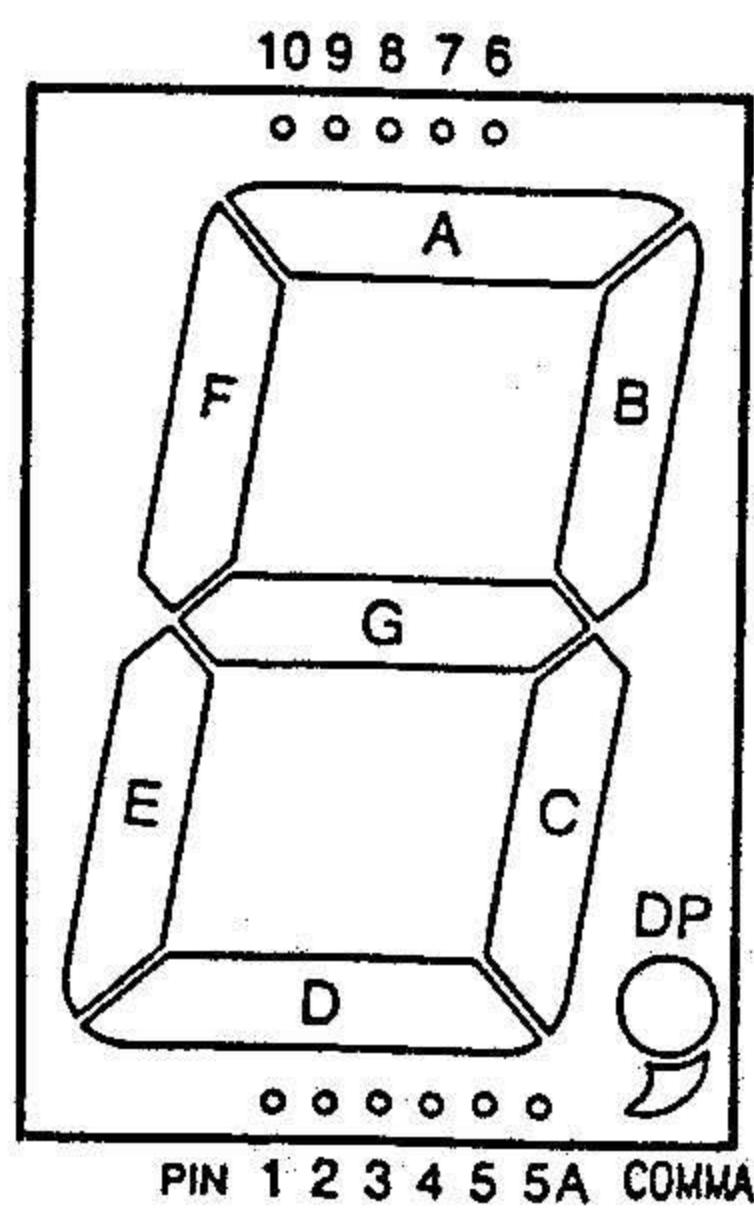
1. High brightness with high contrast
2. Uniform brightness and wide angle viewing
3. Solid state stability and long operation life
4. Cathode common (SND-2310) and anode common (SND-2317) types available.
5. Provided extra pin 5A for comma.



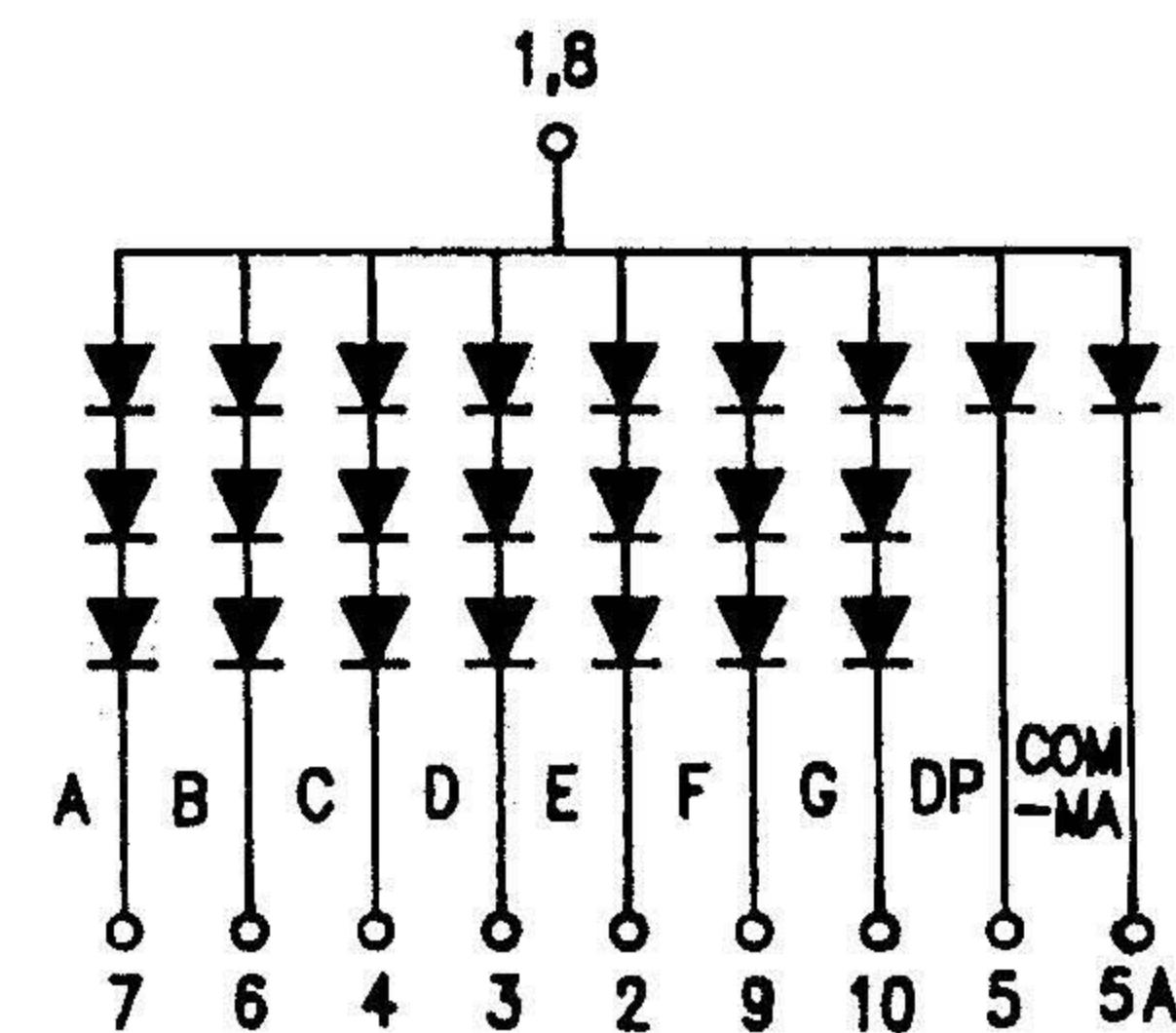
三光半導體株式會社
SAM KWANG SEMICONDUCTOR CO., LTD.
803 Silla Techno Vill., 39-3 Dang-dong Kunpo-City Kyungki-do, Korea,
TEL:031-456-1444/1484, FAX:031-456-4224

CONNECTIONS GUIDE

(Top View)



SND-2310
(Cathode Common)



SND-2317
(Anode Common)

Red SND 2310/2317UR (GaAlAs)

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

Power dissipation/Total	920	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 ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V_F	$I_F = 15\text{mA}$	—	5.6	6.0	V
Reverse current/Seg	I_R	$V_R = 15\text{V}$	—	—	10	μA
Luminous Intensity/digit	I_V	$I_F = 15\text{mA}$	800	1800	—	μcd
Peak wavelength	λ_P	$I_F = 15\text{mA}$	—	660	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 15\text{mA}$	—	20	—	nm

Orange SND 2310/2317SR (GaAsP/GaP)

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

Power dissipation/Total	920	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 ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V_F	$I_F = 15\text{mA}$	—	6.0	6.6	V
Reverse current/Seg	I_R	$V_R = 15\text{V}$	—	—	10	μA
Luminous Intensity/digit	I_V	$I_F = 15\text{mA}$	300	800	—	μcd
Peak wavelength	λ_P	$I_F = 15\text{mA}$	—	635	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 15\text{mA}$	—	35	—	nm

Yellow-green SND 2310/2317UG (GaP)

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

Power dissipation/Total	2060	mW
Power dissipation/Seg	280	mW
Forward current	40	mA
Peak forward current	120 *	mA
Reverse voltage	15	V
Operating temperature	-25 ~ +85	°C
Storage temperature	-55 ~ +100	°C

Electrical/Optical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V_F	$I_F = 30\text{mA}$	—	6.3	6.9	V
Reverse current/Seg	I_R	$V_R = 15\text{V}$	—	—	10	μA
Luminous Intensity/digit	I_V	$I_F = 30\text{mA}$	700	2000	—	μcd
Peak wavelength	λ_P	$I_F = 30\text{mA}$	—	565	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 30\text{mA}$	—	30	—	nm

* Pulse Width 1 ms

Duty Cycle 1/5