

High Brightness 6.0-inch 7-Segment Numeric LED Displays

SND-6010 SND-6017

GENERAL DESCRIPTION

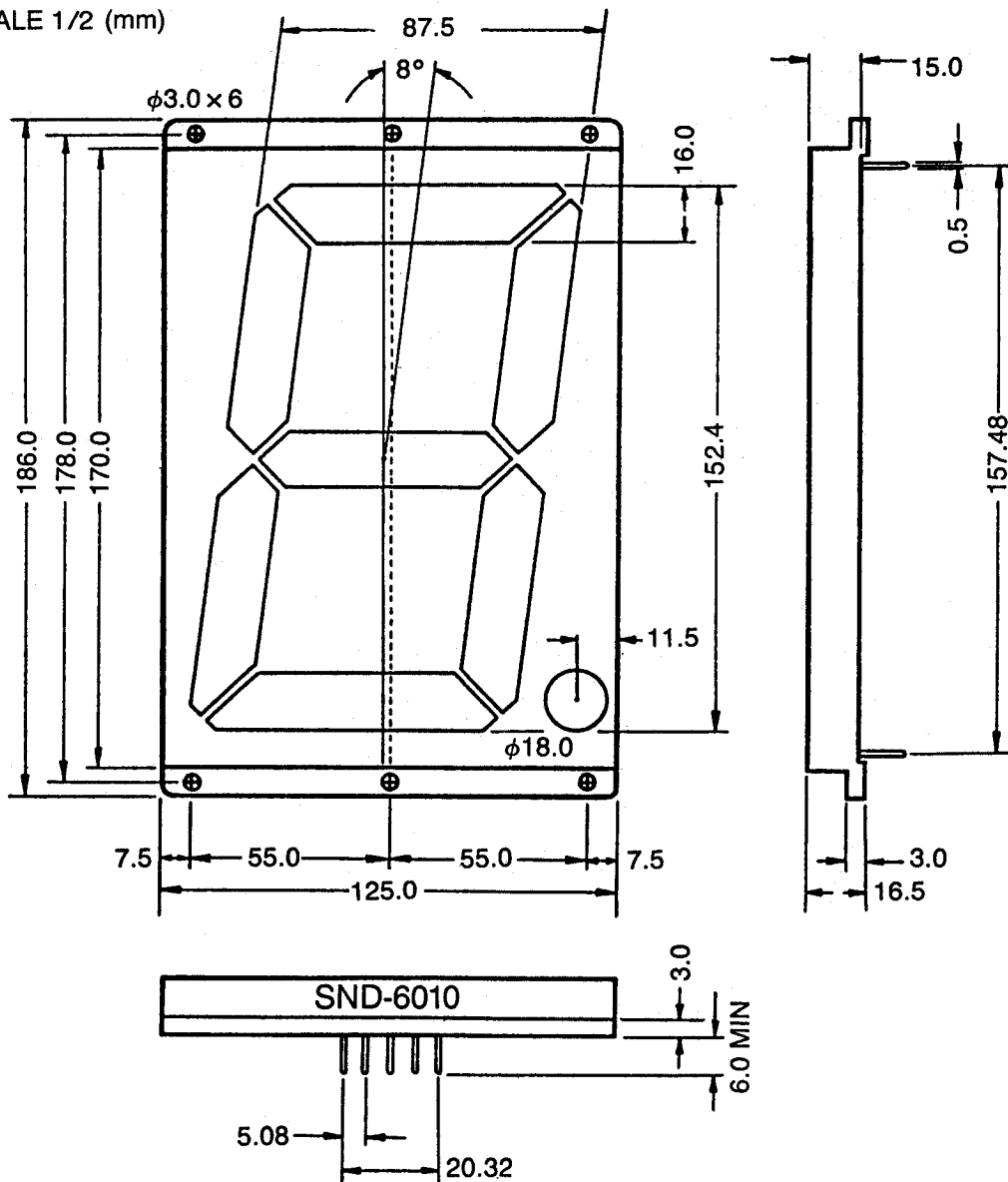
The SND-6010 and SND-6017 series are high reliability epoxy resin molded large 7 segment numeric LED displays which character height is 6.0 inch (152.4 mm) and available in ultra red, amber and yellow-green emitting colors.

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-6010) and anode common (SND-6017) types available.

PACKAGE DIMENSIONS

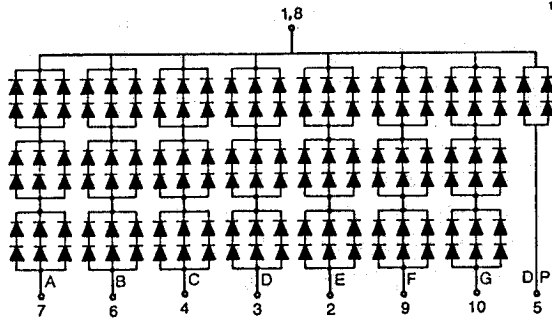
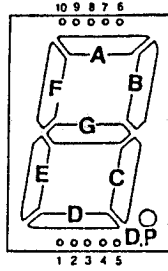
SCALE 1/2 (mm)



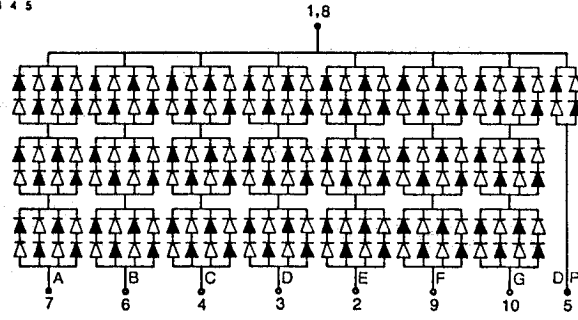
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PIN ARRANGEMENT (Top View)



SND-6010 (Cathode Common)



SND-6010 E (Cathode Common)

SND-6017 / SND-6017 E (Anode Common) All diodes are reversed polarity

Red SND 6010/6017UR (GaAlAs)

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

Power dissipation/Total	5200	mW
Power dissipation/Seg	720	mW
Forward current	60	mA
Peak forward current	180*	mA
Reverse voltage	30	V
Operating temperature	-25 ~ +85	$^\circ\text{C}$
Storage temperature	-55 ~ +100	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V_F	$I_F = 50\text{mA}$	—	10.8	12.0	V
Reverse current/Seg	I_R	$V_R = 30\text{V}$	—	—	30	μA
Luminous intensity/digit	I_v	$I_F = 50\text{mA}$	1300	2500	—	μcd
Peak wavelength	λ_P	$I_F = 50\text{mA}$	—	660	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 50\text{mA}$	—	20	—	nm

Yellow-green SND 6010/6017UG (GaP)

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

Power dissipation/Total	5200	mW
Power dissipation/Seg	720	mW
Forward current	60	mA
Peak forward current	180*	mA
Reverse voltage	30	V
Operating temperature	-25 ~ +85	$^\circ\text{C}$
Storage temperature	-55 ~ +100	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V_F	$I_F = 50\text{mA}$	—	12.6	13.8	V
Reverse current/Seg	I_R	$V_R = 30\text{V}$	—	—	30	μA
Luminous intensity/digit	I_v	$I_F = 50\text{mA}$	800	2000	—	μcd
Peak wavelength	λ_P	$I_F = 50\text{mA}$	—	565	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 50\text{mA}$	—	30	—	nm

Amber SND 6010/6017E (GaAlAs & GaP)

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

Power dissipation/Total	6880	mW
Power dissipation/Seg	960	mW
Forward current	80	mA
Peak forward current	240*	mA
Reverse voltage	30	V
Operating temperature	-25 ~ +85	$^\circ\text{C}$
Storage temperature	-55 ~ +100	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Min	Typ	Max.	Unit
Forward voltage/Seg	V_F	$I_F = 60\text{mA}$	—	12.0	13.0	V
Reverse current/Seg	I_R	$V_R = 30\text{V}$	—	—	40	μA
Luminous intensity/digit	I_v	$I_F = 60\text{mA}$	1500	3000	—	μcd
Peak wavelength	λ_P	$I_F = 60\text{mA}$	—	660/565	—	nm
Spectral line halfwidth	$\Delta\lambda$	$I_F = 60\text{mA}$	—	20/30	—	nm

* Pulse Width 1 ms
Duty Cycle 1/5