High Reliability 0.4-inch 5-Digit 7-Segment Numeric & Clock Displays

SNCD-450 SNCD-457

GENERAL DESCRIPTION

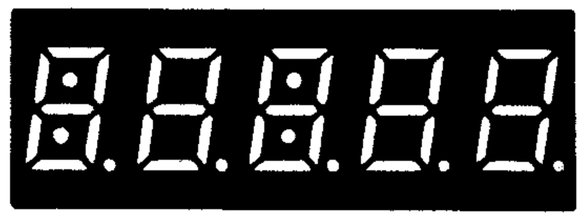
The SNCD-450 and SNCD-457 series are an epoxy resin molded 5-digit 7-segment numeric and clock LED displays of which character height is 0.4-inch (10.16mm).These series provide excellent readability in bright ambients and available in three emitting colors; red, orange and yellow-green.
The standard unit is constructed with black face and milky white segment color.

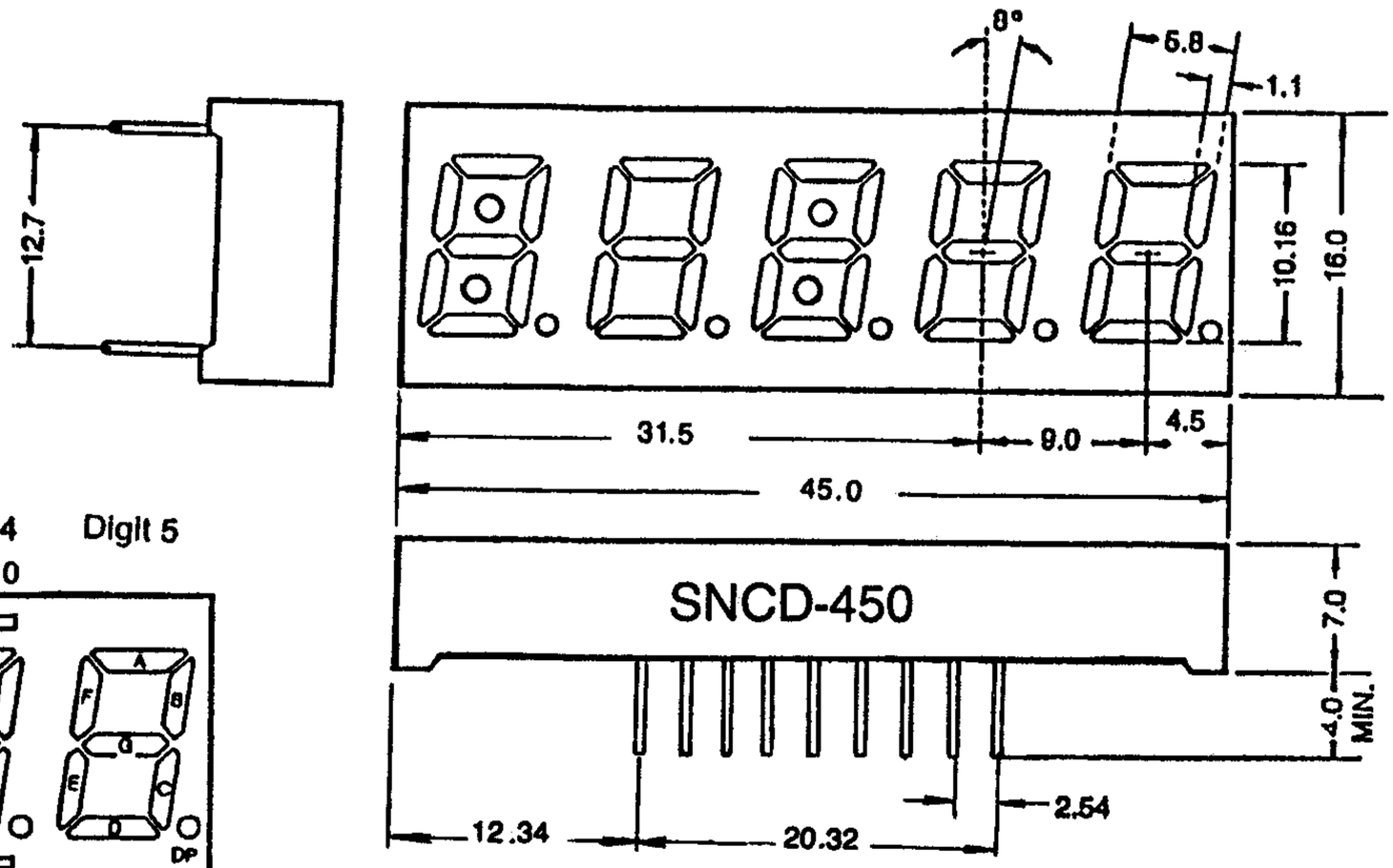
FEATURES

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

PACKAGE DIMENSIONS

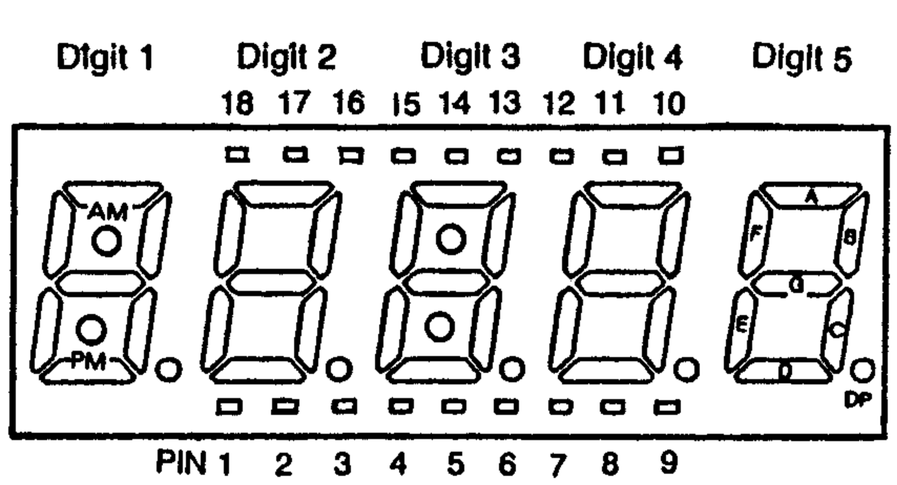
Actual size

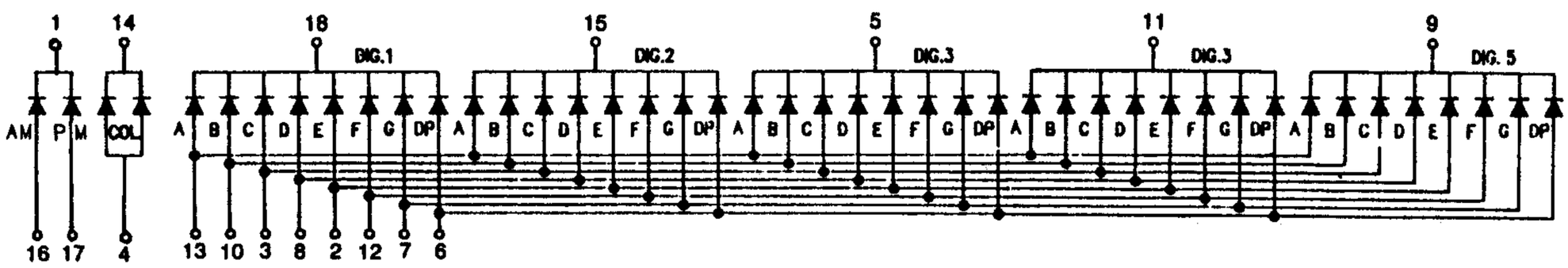




PIN ARRANGEMENT

(Top View)





SNCD-450 (Cathode Common)

SNCD-457 (Anode Common) All diodes are reversed polarity

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

Red SNCD 450/457R (GaP)

Absolute Maximum Ratings (T_a=25°C)

Power dissipation/Total	1760	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	$\Delta\lambda$	I_F = 10mA	—	100	—	nm

Green SNCD 450/457G (GaP)

Absolute Maximum Ratings (T_a=25°C)

Power dissipation/Total	1760	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
Lumirfous intensity/digit	I_V	I_F = 10mA	350	900	—	μcd
Peak wavelength	λ_P	I_F = 10mA	—	555	—	nm
Spectral line halfwidth	$\Delta\lambda$	I_F = 10mA	—	30	—	nm

Orange SNCD 450/457SR (GaAsP/GaP)

Absolute Maximum Ratings (T_a=25°C)

Power dissipation/Total	1760	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	$\Delta\lambda$	I_F = 10mA	—	35	—	nm

Yellow-green SNCD 450/457UG (GaP)

Absolute Maximum Ratings (T_a=25°C)

Power dissipation/Total	1760	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	$\Delta\lambda$	I_F = 10mA	—	30	—	nm

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